

MONDAY, JANUARY 1, 1872.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON THE OPHTHALMOSCOPE IN THE DIAGNOSIS OF INTRACRANIAL DISEASE.

BY WILLIAM F. NORRIS, M.D.,

Lecturer on Diseases of the Eye in the University of Pennsylvania.

Delivered November 23, 1871.

I DESIRE to call your attention to-day, gentlemen, to two cases of intracranial disease, and to study with you the disturbances which they have produced in the innervation of the parts supplied by the cranial nerves, directing your attention more particularly to the changes which have taken place in the circulation and nutrition of the retina and optic nerves, and to the consequent impairment of vision.

D. H., æt. 28, glassblower, presented himself, January 28, 1871, at the University clinic, complaining of failing vision, and intense headache in the right temple, which is always worse at night, often causing him to walk the floor of his room for hours at a time. The eyes are apparently healthy, and are mobile in all directions; but there is a slight falling of the right upper lid, and partial paralysis of that side of the face, causing considerable distortion of the countenance when he laughs. He has marked deafness on this side, and a tuning-fork held at the vertex is only heard on the left side, although when it is placed over the right mastoid cells it is still faintly heard on the same side, thus proving that the auditory nerve is only partially paralyzed. The Eustachian tube is patulous, and the tympanum, although slightly cloudy, presents no marked disease. He complains at times of a loud noise, as of letting off steam, in this ear. Both eyes, when examined with the ophthalmoscope, show marked changes in the optic nerve and the retinal circulation. The optic disks, instead of being in the same plane as the adjacent retina, are in a state of serous infiltration (œdema), and bulge forward into the cavity of the eyeball. The retinal veins are distended and tortuous, and bend down over the projecting intraocular end of the nerve, to spread out as usual in the nerve-fibre layer of the retina. Although the swelling has caused marked changes in the circulation, the strangulation of the nerve-fibres has not been sufficient to interfere materially with conduction, and consequently, as there are no changes in the retina itself, and the macula lutea is healthy, the vision is but little impaired.* The patient states that nine years ago he had a chancre, followed by a suppurating bubo of the left groin; that since that period he has enjoyed good health until the last eight months, when his vision began to fail him, and he was about the same time seized with a spasm (a violent contraction of the arms and legs) while at his work, and became aphasic for several hours. On the exterior of the left thigh, beneath the vastus externus, growing apparently from the periosteum, is an ovoid tumor, three and a half by one and a half inches in diameter. It is soft, elastic, and gives the patient no inconvenience.

Such was the state of the patient, as many of you will recollect him, in January last; and, after carefully weighing his symptoms, I concluded that they were due to a syphilitic gumma, situate probably in the middle fossa of the base of the skull, and that the tumor on

the thigh was of the same nature. He was accordingly treated with mercury until the constitutional effects of that drug were perceptible, and subsequently with iodide of potassium in ten-grain doses. Under this treatment he lost his headaches, the swelling of his disks diminished, and he ceased attendance at the clinic, being able to resume his work. He now returns (November 23) worse than at that period,—vision in the right eye $\frac{20}{L}$, in the left $\frac{20}{XXX}$. The headaches have returned, and superadded to the symptoms before described are a slight divergent squint of the right eye, and an unsteadiness in gait; and when his eyes are closed he falls over towards the right side.

The second patient whom I shall present to you,

D. O'B., æt. 30, is muscular, well nourished, and apparently in good health. He admits having had a chancre four years since, but says it was never followed by any secondary symptoms, but that he has been addicted to the excessive use of alcohol. Last July he had an attack of mania a potu, and, on recovering from it, remarked that his vision was no longer so good as formerly. He complains of frontal headache (always present to a greater or less degree), a feeling of dizziness, causing him to be conscious of an effort to walk straight, of flashes of light when he is in the dark with closed eyes, and of great diminution of the acuity of vision. He is no longer able to read any ordinary type, and can decipher only the big E of Snellen's tables at ten feet ($V = \frac{10}{200}$). The ophthalmoscope shows that in each eye the disk is of a dirty bluish-gray color; that the pink blush due to the capillary supply of a healthy disk is entirely wanting. The disk is not swollen, does not project into the eyeball, and there is no marked alteration in the calibre of the central arteries and veins.

We have here to do with a commencing atrophy of the nerve, caused by an interstitial neuritis,—a process which has probably commenced within the cranium and marched downwards towards the eye (a true "neuritis descendens"). If we could make a section of the nerve, we should probably find the connective tissue forming the sheath of the separate nerve-fibres, as well as that between them and the main sheath of the nerve, in a state of active proliferation; but whether this be due to a creeping syphilitic inflammation of the meninges at the base of the skull, or to an idiopathic proliferation caused by the abuse of alcohol,—a proliferation which is without doubt present in his liver (it is tender on pressure and the area of hepatic dulness is much enlarged),—I must confess I am unable to decide.

I have brought these cases before you in order to contrast two varieties of so-called neuritis: the one a venous engorgement of the optic disk, the other a true interstitial inflammation of the nerve; the one often accompanied with but little disturbance of vision, the other always by a considerable impairment of it; the one may have its origin in any augmentation of intracranial pressure, the other has usually for its starting-point an encephalitis or meningitis.

In order that you may obtain a distinct idea of the mechanism of these changes, I must ask you to consider for a moment the course of the circulation in the normal eye.

As you know, the ophthalmic artery is the sole source of supply of blood to the eyeball, and gives off to it the central retinal artery, the long and short ciliary, and the muscular arteries,—the latter in turn giving off the anterior ciliaries. The blood supplied by these vessels is collected by the vasa vorticosæ, the anterior and posterior ciliary veins, and thrown into the ophthalmic vein, which in turn empties into the cavernous sinus. Now, it is evident that, since the veins of the eyeball

* The small post-ciliary veins consist only of small veinlets from the sclerotic, all the blood from the uveal tract being returned by the vasa vorticosæ.

* January 28.—O. D. Ophthalmoscope shows a hyperopia of one-sixteenth at the summit of the papilla, and only one-sixtieth at the macula.

V = $\frac{20}{XXX}$

O. S. Hyperopia one-twenty-fourth at summit of optic papilla,—one-sixtieth at the macula. V = $\frac{20}{XXX}$

Accommodation good; reads from No. 1 Jæger (Diamond type), from $\frac{5}{8}$ " to 10".

have no anastomosis with any other set of vessels, any slight increase of pressure in the ophthalmic vein will cause dilatation and tortuosity of the veins within the eyeball. This in case of the central retinal vein is particularly striking, because of the anatomical arrangement of the optic nerve. As you are aware, it has a dense fibrous sheath, and, just before entering the eye, each fibrilla divests itself of its fibrous envelope, and these, forming an interlacing bundle of fibres (known as the lamina cribrosa), cross the nerve in all directions, to unite with the external sheath. Thus, at this point its fibrous envelope, being bound down in all directions, is absolutely inextensible, and any slight increase of volume causes a constriction as if from a ligature, the retinal veins swell and become tortuous, and the serum escaping causes an œdema of the nerve-fibres; in short, as Gräfe expresses it, the lamina cribrosa acts as a "multiplier," causing a marked venous stasis in the retina when there is only a slight increase of pressure within the cranium; and thus any increase of intracranial pressure, whether from a tumor, aneurism, hydrocephalus, or other cause, may give us choked disks. On the other hand, an interstitial inflammation causes a gradual compression, both of the vessels and nerve-fibres, in the entire length of the nerve, and is accompanied by less œdema and venous stasis. These distinctions are not hypothetical, but based on numerous autopsies, conducted by eminent pathologists (Virchow, Iwanoff, Leber, and others); and in the one case the alterations in the nerve are usually limited to its intraocular end, and bounded by the lamina cribrosa; in the other they extend throughout its entire length.

In typical cases, the picture presented by a choked disk and that presented by an interstitial neuritis are very different, and in their early stages readily diagnosed; but after the choked disk has long continued, a true interstitial inflammation may set in, and the eye thus present mixed forms, making it difficult, if not impossible, to differentiate them. Where we can do so, it often affords a valuable hint as to the nature of the changes going on within the cranium.

Lastly, gentlemen, let me call your attention to the great advantages which the general practitioner may derive from the use of the ophthalmoscope. In my opinion, as a means of physical diagnosis it is second only in usefulness to auscultation and percussion. In the first of the two cases which you have seen to-day, although the ophthalmoscope rendered the diagnosis more certain, we should probably without it have arrived at the same result; in the second, however, without its aid we should have been entirely in the dark. Let me instance two other cases in which its aid is often invaluable. You know, doubtless, how obscure the diagnosis is often in the early stages of tubercular meningitis. A child loses its appetite, is fretful and cross, has slight headache, occasional vomiting, constipation, and you are in doubt whether it be a transient ailment or the above-mentioned formidable disease. If, under these circumstances, you examine its eyes and find either a choked disk or a neuritis, you need no longer hesitate as to the grave character of the malady you have to deal with. Or, again, a patient walks into your office complaining of dim vision, and the ophthalmoscope reveals to you the characteristic changes of Bright's disease in the optic nerve and retina; you are at once put on the track of the fundamental disease, even if, as sometimes happens, the constitutional symptoms have been so little developed that he does not consider himself sick. Moreover, I need only mention to you the frequency with which changes in the interior of the eye accompany fractures and diseases of the spine, locomotor ataxia, cerebritis, meningitis, and the neuritides arising from the toxic

effects of lead, alcohol, and tobacco, to convince you that it is an important aid to diagnosis.

I would not conceal from you that it is difficult to acquire skill in its use; but it is not more difficult than to acquire skill in auscultation and percussion, or in the use of the microscope. To obtain the full advantages derivable from it, you must learn to use the upright image in your examinations, since you thus obtain a much more magnified view of the fundus than is attainable with the inverted, and since details which escape your notice in the latter, owing to the intense illumination and the small size of the image, are readily detected by the former. Indeed, those who cannot use the upright image are unfit to make any refined diagnosis of intraocular disease.

In conclusion, let me remind you that the internal half of the disk is, in a state of health, always redder than the external, and that the physiological varieties in its shape and appearance, as also in the distribution of the vessels, are almost as infinite as the variety of feature in the human countenance, and that therefore you should avail yourselves of every opportunity to study normal eyes,—and not too lightly give an off-hand opinion as to any slight variation which you may detect from the typical appearance of the optic disks.

To those of you who desire to become familiar with the literature of the subject, I would recommend the late work of Allbutt,* as giving not only his own observations and conclusions, but also an able résumé of those of the best Continental and English observers.

ORIGINAL COMMUNICATIONS.

OSTEOLOGICAL NOTES.

BY HARRISON ALLEN, M.D.,

Professor of Comparative Anatomy in the University of Pennsylvania.

THE LONG BONES IN HEALTH AND DISEASE.

THE characters of a long bone are of two kinds,—generic and specific. The generic are those pertaining to the general shape of the bone as determined by its *static* relations; the specific are those pertaining to the motion of the bone, or its *dynamic* relations. The variations in the shapes of bones of the adult in health and disease are also of two kinds, and correspond to the above. Modifications of the generic character, as might be supposed, are by far the less frequent, and so far as I know, are almost entirely restricted to what may be called *the retention of the juvenile characters*.

The exact extent to which the early shape of a bone is preserved in that of the adult is yet to be determined. Nor can this be done until a critical examination of skeletons of "dwarfs" and "giants" and of the subjects of rickets shall have been instituted. I have observed sufficient, chiefly from among specimens of the latter disease, to suggest that the bones of "dwarfs" are examples of a premature cessation of the epiphyseal period, thus stunting the growth of the diaphyses, as those of "giants" may be the result of a prolonged epiphyseal condition, permitting the shafts to attain an unusual size. The very common disproportionate volume of the head (too large in the former, while not large enough in the latter) is readily explained on the ground that the skull is without epiphyses. The size of the skull is determined by the necessities of contained parts,—viz., the brain, organs of sense, and the teeth. The bones of the limbs, on the other hand, as is known.

*The Use of the Ophthalmoscope in Diseases of the Nervous System, etc. By T. C. Allbutt, A.M., M.D. London and Philadelphia, 1871.

are shaped by the needs, as it were, of the body for support and motion.

Now, in rickets the epiphyses often unite too early with the diaphyses, and it is interesting to note that the epiphyses will often preserve throughout life the shape existent at the time of the premature union. This is particularly noticeable with the epiphyses composing the tibio-femoral articulation. In another group of specimens, chiefly of the tibia, the proximal epiphysis apparently ceases to grow, while great activity is evidenced in the shaft. The resulting shape with such is unlike that of the traditional tibia. The condyloid facets are small; the entire proximal extremity appears as though thrust back upon a long misshapen shaft, whose tuberosity is inconspicuous. I conjecture that such bones have been secured from weak, thin-shanked individuals,—examples of those youths of whom it is said "they have outgrown their strength."

The *specific* or dynamic features of a long bone are due, as above remarked, to muscular relations. The statement in the form of a proposition would read thus: The causes of specific variation in the forms of long bones are to be found chiefly in the muscles associated with them. The shapes of the bones of A differ from those of B, inasmuch as A and B follow different occupations. The tailor, sitting with thighs abducted, would present femurs showing opposite tendencies to those of the dragoon, whose adductors are powerfully developed. It is, of course, impossible from examining cabinet preserved specimens to determine the occupation of the individuals from whom they were obtained, since the bones are, with but few exceptions, destitute of history. Nor can such points, which are not without value, ever be settled outside of a hospital museum, where to every osteal specimen a full description of the person yielding it may be attached. In the absence of this, it remains for the anatomist to note a few of the more striking differences to be detected in the forms taken from an indiscriminate collection.

The *humerus* is an example of the rule that in long bones the greater portion of the shaft is devoted to the origin of muscle.

The bone is best divided, not into a shaft with extremities, as is said of it in common with all long bones, but into an upper and a lower half, the boundary between them being determined by the deltoid ridge. The upper and more massive half is devoted to the *insertion* of the muscles which move the superior extremity on the trunk. The lower and more slender half is given to the *origin* of those muscles which flex the forearm. The above is true, of course, only of the anterior surface of the bone. Posteriorly the entire facies is occupied by the origin of the extensor of the forearm.

The upper half of a longitudinal section of the humerus exhibits a cylindrical form relatively of large calibre, having thin walls. The lower half is more compressed, and has thicker walls, with a diminished calibre. At the junction of these two regions the points of insertion of the deltoid and pectoral muscles give increased massiveness.

The inner wall of the bone is straight from the edge of the proximal articular surface to a short distance above the epitrochlea, where it curves somewhat abruptly inwards. The outer wall, on the other hand, is irregular. The border is divided into two concave lines separated by the deltoid impression, the upper of which may be said to be placed somewhat obliquely from above downwards and outwards.

Now, the varieties of the humerus are three in number. The first, which may be called the *inflated* humerus, is characterized by an increase of diameter of the medullary canal above the deltoid ridge, and by great thinning of the walls of the bone. The second—

the most common variance from the average bone—is the *angulated* humerus, and consists essentially in an inclination inward of the upper insertional half at an angle with the shaft. The third is the *curved* humerus, so called from the fact that the lower posterior aspect of the bone at the region devoted to the origin of the third head of the triceps muscle is markedly convex, and will not permit the ends of the bone to lie in the same horizontal plane, as can readily be seen by placing the bone by its posterior surface upon a table, when the curved shaft will at its lower half rest on the plane, while the ends, particularly the distal, will be elevated. The lateral lines seen at that part of the shaft, corresponding to the continuation of the epicondylar and epitrochlear ridges, define this region anteriorly, which is one of the most variable in the humerus. From being almost concave, with the lateral lines corresponding to the posterior border of the shaft, it may have every degree of development, the lines being compelled to occupy a more median position along the inner side of the bone, until the muscular area becomes so markedly convex as to apparently curve the bone forwards, as above noticed.

The *femur* resembles the humerus in being operated upon by two sets of muscles,—one moving the thigh on the trunk, the other moving the leg on the thigh. The relative size of the areas differs widely in the two bones. In the femur the upper third is devoted to that purpose; in the humerus it is the upper half. But, as in the case of the latter bone, the most natural division is effected by the manner in which its muscles are associated with it. The upper third of the femur differs in every respect from the lower two-thirds. It is not, however, apt to be inclined inwards, but is compressed antero-posteriorly. The almost always well-defined, rounded outer border of the shaft, which defines inferiorly the proximal third of the bone, is immediately in advance of the insertion of the gluteus maximus muscle.

I have observed in many specimens of interstitial absorption at the neck of the femur well-marked examples of this widening of the upper part of the bone.

A femur in the Wistar and Horner museum exhibits in a striking degree this peculiarity. The bone was for a long time considered to be an example of osseous union after fracture of the neck within the capsule. Upon sawing it open, I was gratified to have my suspicions of the nature of the specimen confirmed. Photographs of this bone were afterwards exhibited before the College of Physicians of Philadelphia by Dr. John H. Packard.

In the lower two-thirds of the bone the chief variation is seen in the tendency of the shaft to curve *forwards*. It is suggestive that in both humerus and femur the *extensor* surface is the one which becomes convex.

It is often said that the differences between the heights of adults are due to the variations in the lengths of their femurs. It would be more exact—granting for the nonce that the above position is correctly taken—were it expressed as follows: It is found that the linea aspera is of about the same length in all femurs; therefore variations in the lengths of different femurs, and conversely in the heights of individuals, are to be sought for in the portions of the shaft on the distal and proximal ends of the linea aspera.

The linea aspera is not placed directly in the middle of the shaft of the femur. It inclines either to the inner or the outer side. On the whole, it is found more commonly nearer the inner than the outer border, and the inner aspect of the shaft will often be nearly straight, while the outer is conspicuously convex.

The *cervical fossa*. Under this head may be included a shallow depression on the anterior surface of the neck of the femur, not noticed, so far as I know, by authors. The fossa is placed immediately below the articular surface, with which in fresh specimens it

is continuous, and covered with cartilage. Its size varies from that of a split pea to that of a chestnut. It is quite commonly furnished with minute openings communicating with the spongy tissue of the neck of the bone.

In a specimen of the upper third of the femur, preserved in the cabinet of the Pennsylvania Hospital as an example of osteoporosis with osteomyelitis, "so called," a sequestrum has extended from the distal end of the specimen quite up to the position of this fossa. From the relation between the sequestrum and the fossa, it would be easy to confound the latter with a product of diseased action.

SUPPRESSION OF THE SECRETION OF THE LACHRYMAL GLAND.

BY GEORGE C. HARLAN, M.D.,

Surgeon to Wills Ophthalmic Hospital.

AN Irish servant-girl, twenty-two years of age, applied at the hospital for relief from the effects of an extensive burn of the face and forehead, received seven years ago. The whole left cheek and temple and left side of the forehead were involved in the cicatrix. The lower eyelid was drawn down and everted and the punctum obliterated. The upper lid was drawn up so that the lashes occupied exactly the position of the brow at the edge of the orbit, and the whole palpebral conjunctiva was exposed. The sight of the eye was unimpaired; there was no epiphora, and the normal moisture of the conjunctiva was maintained. She suffered no other inconvenience than the great deformity, of which she was anxious to be relieved. The edge of the upper lid was freed from the orbit by an incision just above the lashes, and a new lid was formed of skin transplanted from the forehead. The operation resulted very satisfactorily. The point of special interest in the case is the fact that no injury or inconvenience followed the complete obstruction of the derivative part of the lachrymal apparatus. She stated that since the accident there had been an entire absence of tears in that eye, even when they were plentifully secreted by the other, as in crying. The function of the lachrymal gland must have been either destroyed by the direct effects of the burn, or suspended in consequence of the obliteration of the puncta: the latter seems more probable, as the position of the gland within the orbit would be likely to protect it.

It is claimed by the advocates of the operation for destroying the sac in incurable or obstinate cases of obstruction, that it is followed by a suppression of the secretion of tears; and there seems to be no good reason why an obstruction of both canaliculi should not have the same effect. This result does not always follow, however, as Laurence, Dixon, and others have extirpated the lachrymal gland for the cure of lachrymation in just such cases.

It is a well-known fact that when the lachrymal gland is removed, the dryness of the conjunctiva that might have been expected is not met with; the source of the continued secretion does not seem to be so generally known, or at least it is very rarely mentioned. The moisture of the conjunctiva under such circumstances is usually attributed to the secretion of mucus, though this is not its only or perhaps its chief source. Something more than mucus is needed, and is supplied by the small racemose glands, about forty in number, found in the connective tissue beneath the reflected portion of the conjunctiva, and with ducts opening on its free surface. Their structure is the same as that of the lachrymal gland, and they secrete true tears, and hence are sometimes called "accessory lachrymal glands."

In the case of a young lady, from the external canthus of whose eye I removed a tumor, the lachrymal ducts were unavoidably closed by the operation. Being something of a philosopher, she had no special use for her lachrymal glands for several months, and was then astonished to find that she cried with one eye only, the other not contributing a tear. There had been no unusual dryness of the eye, nor had it noticeably differed from the other in any respect. In her case, at least, and in that above recorded, it would seem that the function of the lachrymal gland had been entirely emotional, and that the tears for general purposes were supplied by the accessory glands. In the first case, the canaliculi being closed, excessive accumulation of tears was prevented by evaporation from the exposed conjunctiva.

CASES OF TAPEWORM TREATED BY KAMEELA.

BY S. R. KNIGHT, M.D.,

Superintendent of the Episcopal Hospital, Philadelphia.

EVERY physician will be found to have a sovereign remedy for tapeworm, such as kosso, emulsion of pumpkin-seed, oil of turpentine, aromatic sulphuric acid, or oil of male-fern. My friend Dr. Edwin Morris, of Spalding, England, has used areca-nut with success. I have found kameela successful in cases occurring in my own practice in which other remedies have failed.

Mrs. A., aged fifty-six, called upon me complaining of pains in different parts of the body; she was much exhausted and emaciated. Obstinate constipation existed. She was treated at different times by means of purgatives, with liquid diet, emulsion of pumpkin-seed, oil of turpentine, and oil of male-fern, but without the desired effect, although small portions of the worm were passed. When I saw the patient for the fourth time, I ordered the following:

R Kameela, $\overline{\text{ss}}$;
Syrupi simplicis, $\overline{\text{ss}}$. M.

S.—Take a tablespoonful at a dose.

Next morning, having taken one dose, the patient passed a tapeworm fifteen feet in length. The remaining dose produced no effect. The patient recovered her health, and has remained well for two years.

Two other cases, having the same symptoms, were treated by me with kameela, and both terminated successfully.

CORRESPONDENCE.

THE COOKING OF FOOD AT A TEMPERATURE LESS THAN 100° CENTIGRADE.

TO THE EDITORS OF THE PHILADELPHIA MEDICAL TIMES.

MESSRS. EDITORS,—It is at all times a pleasure to be able to transmit to you any communication relative to the observations of our learned confrère M. Jeannel, with whose great intelligence and elegant style you have probably become familiar through the medium of the Bordeaux *Journal de Médecine*, of which he has for some years been the editor. At the last meeting of the Academy of Medicine M. Jeannel communicated the results of his observations, not, however, upon any disease or medicine, but upon the ordinary *pot-au-feu*. The subject is not a trifling one, and is not deficient in interest; and I quote as follows from his communication:

"The well-attested success of the Norwegian saucepan, which is in common use among the people of mountainous countries, where the boiling-point of water is often lower than four or five degrees below 100° C.,—the ordinary processes not being

different from those on the seacoast,—demonstrates that the cooking of food does not absolutely require a temperature higher than 100° C., or boiling at the pressure of 0 mm. 76.

"The boiling-point of water diminishes about $0^{\circ}.332$ —i.e. one-third of a degree—centigrade for every one hundred metres of elevation above the surface of the sea.

"I tried first to calculate the amount of aromatic principles unnecessarily evaporated and of fuel uselessly burned when beef-broth is made at the boiling-point of water and under the ordinary pressure of the atmosphere, and, secondly, to establish the fact that meat and vegetables may be thoroughly cooked at a temperature of $+95^{\circ}$ C.

"The following table gives the elevation, the barometric pressure, and the boiling-point of water in a number of cities or inhabited places:

	Elevation.	Height of the barometer.	Boiling-point of water.
Potosi (Bolivia) . . .	4,061 m.	0.454 mm.	$86^{\circ}.2$
Quito . . .	2,908 "	0.526 "	90°
La Plata (Bolivia) . . .	2,844 "	0.530 "	$90^{\circ}.3$
Mexico . . .	2,277 "	0.569 "	$92^{\circ}.1$
St. Gothard . . .	2,075 "	0.584 "	$92^{\circ}.8$
Briançon . . .	1,321 "	0.643 "	$95^{\circ}.4$
Baréges . . .	1,241 "	0.649 "	$95^{\circ}.7$
Madrid . . .	608 "	0.704 "	$97^{\circ}.9$
Clermont-Ferrand . . .	407 "	0.722 "	$98^{\circ}.6$
Geneva . . .	375 "	0.725 "	$98^{\circ}.7$

M. Jeannel draws the following conclusions:

"1. The boiling of water in which meat is cooked to make broth, or in which vegetables are prepared for the table, has no advantage other than that of showing, by the escape of steam,—a phenomenon which attracts the attention even of the most ignorant,—that the fire is sufficient to insure the cooking of the food; but, on the other hand, continued boiling during the process of cooking has two disadvantages: First, the aromatic principles carried off by the steam are dissipated in the atmosphere, and the flavor of the food is thus diminished. Secondly, a very considerable amount of fuel is wasted.

"2. Meat and vegetables, either fresh or desiccated, can be cooked at a temperature of $+95^{\circ}$.

"3. Cooking at $+95^{\circ}$ requires a little more time than cooking at the boiling-point under the pressure of 0 mm. 76, in the proportion of sixteen to fifteen or fourteen for beef broth, and in that of about five to four for potatoes or desiccated vegetables.

"4. As regards the consumption of fuel, there is an economy of about forty per cent. when the cooking is done in an ordinary stove.

"5. The broth and the meat are much more palatable when they have been cooked at a temperature of $+95^{\circ}$ and without more boiling than is necessary for scumming, and for this purpose the term of boiling need not exceed fifteen minutes.

"6. By cooking at $+95^{\circ}$ the yield of the cooked meat is increased by from three to six per cent.

"7. By cooking at $+95^{\circ}$ the yield of broth is increased ten per cent., so that the same quantity of broth may be obtained as when the temperature is raised to 100° , with ten per cent. less water.

"8. It would be easy for the head cooks, in large establishments (hospitals, barracks, etc.) to regulate the temperature in their saucepans by means of thermometers and registers. Where the cooking is done by gas, this would be exceedingly easy.

"9. The thermometer (which should be of the description

used by sugar-refiners and brewers, and which may be obtained of any of the opticians in Paris) should be protected from injury by being encased in a fenestrated covering of metal, leaving the scale uncovered at the upper part, so that when the thermometer is hung by a hook to the edge of the saucepan, its scale can be seen through an orifice or a notch made in the lid. The damper of the stove should be shut as soon as the temperature approaches $+100^{\circ}$, and opened whenever it tends to fall below $+95^{\circ}$."

NOTE.—After skimming the *pot-au-feu* and adding vegetables and spices, the boiling saucepan should be placed in a box, the inside of which, as well as the cowskin lid, is lined with a layer (ten centimetres in thickness) of coarse woollen stuff. Thus shut up in a non-conductor of heat, the saucepan cools very slowly. At the end of five minutes the temperature of the water is still $+70^{\circ}$, the bouillon is made, and the meat, vegetables, and spices are cooked without the loss of any of their aromatic principles by evaporation. Such is the Norwegian saucepan, the use of which cannot be too highly recommended.

"I learned, and not without great surprise, the day after making my present communication," says M. Jeannel, "that an official commission, appointed by a minister some years ago to examine the Norwegian saucepan, reported that the meat was not cooked by it. My personal experience with it does not warrant this conclusion. At all events, the force of my arguments does not depend on the success of the Norwegian saucepan."

With great respect, etc.

DR. FORT,

Professeur libre d'Anatomie.

STYPTIC COTTON.

TO THE EDITORS OF THE PHILADELPHIA MEDICAL TIMES.

MESSRS. EDITORS,—In the September number of the London *Pharmaceutical Journal* for 1870 there is an extract from the *Schwabischer Merkur*, written by Dr. Ehrle, of Isny, in which he gives the following formula for the preparation of the cotton:

"Take cotton of the best quality; boil in a weak solution of soda (four per cent.) for about an hour; wash with cold water; press out and dry. Then steep the cotton in a solution of the chloride of iron (diluted one-third); press and air-dry; after which pick to pieces."

This prepared cotton is of a yellowish-brown color, and requires to be kept protected from the air, as it absorbs moisture very rapidly, owing to the deliquescent character of the iron-salt which it contains. Having prepared some for experiment a few months ago, after using it for a time it occurred to me that if the sol. ferri subsulph. were used in its preparation instead of the sol. ferri chlor., a superior article would be made, inasmuch as the cotton would not then absorb moisture, and would not need the care to protect it which this did. I made some accordingly, and found it quite as efficient a styptic, and entirely free from the objection referred to.

By the sample which I herewith send you, it will be seen that it is of a light straw color and perfectly dry to the touch. It is easily carried and ever ready for use. It acts chemically and mechanically,—chemically through the iron-salt which it contains, and mechanically by means of its bulk and closely-pressed fibres. It has been in constant use at the St. Mary's Hospital for some months, and is looked upon by the surgeons there as a valuable addition to their armamentarium. The

many instances in which its valuable aid may be called upon will suggest themselves to the surgeon and obstetrician, and need not, therefore, be specified here. While there is nothing new in presenting either of these iron-salts as a styptic, yet I think the profession indebted to Dr. Ehrle for the idea of putting them in a much more available and efficient form.

Respectfully yours,

JAMES CUMMISKEY.

PHILADELPHIA.

NOTES OF HOSPITAL PRACTICE.

UNIVERSITY OF PENNSYLVANIA.

CLINIC FOR DISEASES OF THE SKIN, DECEMBER 6, 1871.

SERVICE OF DR. LOUIS A. DUHRING.

Reported by Dr. Arthur Van Harlingen.

HERPES ZOSTER.

IN introducing this case the lecturer premised that, in the examination of diseases of the skin, diagnosis should be made from the appearances presented to the eye, and not from the statements of the patient.

In the study of this patient, an engine-driver, aged 35, the first thing that strikes one is the situation of the eruption. It is on the trunk, which it about half encircles. It consists of an aggregation of pea-sized vesicles and pustules. It can be seen that it is of some days' duration, for here are crusts which have taken some time to form; it may have been one or two weeks since it first made its appearance.

The affection before us may be mistaken for one of several different diseases. If you only saw a small portion of the eruption in certain parts, it is possible you might be inclined to pronounce the affection dermatitis-syphilis. You would be still more likely to form such an opinion if you had listened to the statement which the patient has just volunteered,—namely, that he contracted venereal disease some time ago.

Eczema in some of its forms bears a strong resemblance to the disease before us; but, without going any further, we may say that we have here neither the one nor the other of the affections mentioned, but simply what is known as herpes zoster.

The history of these cases is so characteristic that, had we not decided to make our diagnosis from the appearances alone, the account which the patient gives of the course of the disease would alone have indicated its nature. He says that it has lasted about ten days,—that it began by a fearful stinging and burning pain in the part, so severe that he was obliged to desist from work.

This lasted three or four days; then the eruption commenced coming out, and the pain in a measure subsided, the disease from this time tending to recovery, until it has reached its present condition.

Herpes zoster when at its height is characterized by the appearance of an aggregation of vesicles closely resembling clusters of pearls upon a red base. The case before us is by no means typical in its aspect, for, while under ordinary circumstances the vesicles of zoster gradually become desiccated, in the present instance many have developed into pustules, and some have broken down, forming small ulcers.

One of the characteristics of zoster is pain occurring early in the course of the disease, and usually following the direction of some particular set of nerves, the eruption, when it subsequently appears, being, as a rule, distributed over this tract.

The name zoster or zona was given to this affection on account of the belt-like arrangement which it was frequently found to assume. It very unusually, however, encircles the entire body, but more commonly a lateral half. It is not, moreover, confined to the trunk, but may occur on the face, scalp, or limbs. It very rarely attacks the same subject twice; though cases are on record where frequent recurrences have been observed.

The treatment is in most cases simply palliative, as the

disease, having run its course, spontaneously tends to recovery. Had I seen this patient earlier, I should have ordered him the following prescription as a local dressing:

R Unguent. Zinci oxyd. benzoat., $\mathfrak{z}\mathfrak{i}$;
Glycerinae, $\mathfrak{z}\mathfrak{i}\mathfrak{v}$.

Misce. Sig.—Apply morning and evening.

In many cases we may make use of simple starch flour dusted over the vesicles to prevent the oozing subsequent to their rupture, often due to friction against the clothing.

[Dr. Duhring here incidentally remarked that it was just in this class of cases that homœopaths claimed success for the treatment of diseases of the skin.]

As is well known, this affection runs a course ending in spontaneous recovery without treatment; and here the homœopaths give their "dilutions," claiming a specific action for their drugs, and getting at times the credit of a wonderful cure. But in the treatment of zoster we find that no medicine possesses any influence in averting or changing the course it usually runs, and the patient recovers in the same manner whether he takes this or that medicine, or none at all.]

ECZEMA PAPULOSUM.

B. D., aged 60, bobbin-winder. When you observe, as in this case, the patient's body covered with scratch-marks, it is unnecessary to inquire whether the disease is accompanied by itching; for the effects are always visible.

Scattered over her legs and thighs are reddish papules. On picking up the skin at these points it is felt to be quite indurated. On the arm a number of these papules are confluent, forming a patch. The patient states that no fluid has at any time escaped from them.

The duration of the affection has been about a year, and during the last few months these dark-brown elevations which are scattered over the surface of the leg have appeared.

These last, which are somewhat elevated, resemble the crusts formed by the desiccation of some serous or purulent exudation. This affection is, then, a dry eczema of the papular form, and though in the present instance unaccompanied by discharge, yet if the eruption were kept in a state of irritation by frequent washing in soap and water it would develop into a well-marked case of wet eczema.

The elevations of which I have just spoken are nothing more than collections of hypertrophied papillae covered with sebum,—in other words, warts. As regards treatment, we should employ in the present instance no active local measures. Such a course would just now be quite out of place. Part of her troubles are no doubt the result of bad health; and I shall consequently put her on a course of ferruginous tonics, together with cod-liver oil.

To allay the itching of which she complains, I shall direct her to dissolve a powder of carbonate of soda, containing two ounces, in about twenty gallons of water, to be used as a bath morning and evening, remaining in it about twenty minutes.

CONDYLOMATA OF THE LIP.

R. F., aged 25, police-officer. The growth which you observe on this man's upper lip has existed for the last six months.

At first sight we might be inclined to pronounce it an epithelioma; but a more careful examination will convince us that we have to deal with an hypertrophy of the papillae, sometimes called vegetations, or, in other words, a collection of acuminate warts.

Vegetations are generally supposed to be connected with syphilis, but in the present instance this is not the case. Even when we find warts occurring upon the genitals, we are not justified in pronouncing them syphilitic in their origin.

Nor must you confound the disease before you with a *plaque muqueuse*, or mucous patch, which to a certain degree it resembles.

This patient has been ordered the following preparation, which is applicable when we desire a mild caustic, and is known as Rochard's ointment:

R Iodini pulv., gr. viij;
Hydrarg. Chlor. mit., $\mathfrak{z}\mathfrak{j}$;
Adipis, $\mathfrak{z}\mathfrak{i}\mathfrak{j}$.

Misce. Fiat unguentum.

Under the use of this ointment the hypertrophied papillae are disappearing, and in a short time will be entirely gone. Should the ointment, however, prove too mild to effect our purpose with sufficient rapidity, we may resort to the use of potassa fusa, argenti nitras fusa, or chromic acid.

[The Rochard's ointment proving slow in its action, the daily application of argenti nitras fusa was commenced a few days later, under the use of which the growth rapidly disappeared, and the patient has since been discharged, cured.—A. V. H.]

ACNE PUSTULOSA.

P. M., aged 50, rag-picker. This disease is a chronic one. The patient tells us he has had it about a year.

This fact at once excludes the idea of its being the eruption of variola, to which at first glance it bears a close resemblance.

Another affection for which it may be mistaken is a pustular syphilitic disease of the skin, which it also resembles. But were it the latter we should find it probably involving the scalp, which in the present instance is not the case.

Having eliminated variola and syphilis, we have but one disease remaining: this is acne.

We have here an aggravated form of this affection; for you will not often see a case where the disorder has made such marked progress. A peculiar feature is the age of the patient, —fifty years. Acne is a disease of the young, not ordinarily occurring in persons over twenty-five. In the present instance the affection is probably due to ill health, an acne cachecticorum so called, and if we build up this man's system we shall do much towards the cure of the disease.

The eruption is the product of a low, vitiated state of the secretions; and in this connection you will notice the tendency to the formation of small abscesses at various points, a symptom not characteristic of most kinds of acne. The one before us is the slow pustular variety, not resembling the ordinary acne punctata.

I shall order this man to apply the unguentum diachyli, of which I give you the formula, taken from Hebra, as it is not official, and you will not be likely to find many apothecaries who keep it on hand:

R Olei Olivarum opt., ℥xv;
Lithargyri, ℥ij-℥vj;
Coque; dein, addi
Olei Lavandulae, ℥ij.

Misce. Fiat unguent.

An attempt to apply any more stimulating ointment in a case of this kind would bring out new pustules and make matters worse.

In addition to the external application, I shall order this man the following:

R Ferri et Ammoniac citrat., ℥j;
Liquor. Potassae arsenit., ℥ss;
Tinct. Cinchonae comp.,
Syrupi simplicis, aa, ℥ij.

Misce. Sig.—Teaspoonful after each meal.

The arsenic is given, not with a view to any specific effect to be expected from it, but merely as a general tonic, and, as you see, in small doses. Besides the iron and arsenic, I shall order the patient cod-liver oil.

SERVICE OF DR. GEORGE STRAWBRIDGE.

CLINIC FOR DISEASES OF THE EYE, DECEMBER 7, 1871.

Reported by Dr. Charles B. Nancrede.

DR. STRAWBRIDGE opened the clinic by some preliminary remarks concerning the appearance, size, and ultimate structure of the crystalline lens. He demonstrated by aid of a model the unequal curvatures of this body, showing that the posterior surface had much the greater convexity. He also gave in this connection the average size of the lens, stating its diameter to be about 3.5''', and that this fact was of great value in determining the size of the incision for its extraction, as, to allow such a body to pass with ease, the opening must be from 4''' to 4½'''.

The lecturer next proceeded to explain the structure of this portion of the refracting media, saying that by boiling we could cause the lens to break up into three triangular segments, which could readily by means of needles be split up into laminae. Further, he stated that on viewing a horizontal section under the microscope we could easily perceive that it consisted of tubules, which when seen transversely divided were polygonal in form. The minute structural elements were then shown to the class under the microscope, the specimen being the crystalline lens of a bullock, which the lecturer said was similar in structure to that of man.

Before introducing the cases, Dr. Strawbridge referred to the different varieties of cataract, which he had described more minutely at a former lecture, especially the soft and hard, examples of which he intended showing the class. He next gave the diagnosis between simple and complicated cataract, urging the absolute necessity of this before attempting to operate.

A cataractous eye fit for extraction should answer to the following tests: First, that a candle-flame should be distinctly seen at a distance of eight to ten feet, and that the patient should be able to tell when the hand, or any other object, passed before the flame; second, that the periphery of the retina should be proved to be sound by the direction of the flame being clearly pointed out when moved up or down, to the right or left; and, thirdly, he mentioned another test as to the integrity of the retina, viz., photospheres, or that when the eye is pressed upon by any object, as a pencil, or the finger-tip, there should be colored rings seen projected in a direction opposite to the point of pressure. For instance, if pressure be made upon the outer portion of the globe, the photospheres will be seen to the inner side, and *vice versa*. This is owing, the lecturer further explained, to excitation of the rods and cones of the retina by the pressure, and their projecting the image in the line of their axes, therefore away from the point of pressure; consequently the image is seen on the opposite side of the eye.

The patient, J—, was then shown to the class. In accordance with the above principles, Dr. Strawbridge remarked that the patient had but one eye fit for operation, but that unless he had tried the above tests the unsound eye might have been operated upon and extraction most successfully performed, and yet the eye have proved totally useless from almost entire destruction of the function of the retina. The right eye, however, was without any complication.

The next patient shown furnished a beautiful example of a laminated soft cataract, giving a milky-clouded appearance behind the pupil. This case had been operated on by the needle for solution a week previously. It was probably congenital, and would require five or six more needle-operations for its complete removal.

Dr. Strawbridge then said, "Gentlemen, the operation I propose performing to-day is that of Von Graefe, and is represented in its different stages in the diagrams before you. The knife is, as you see, long, narrow, about a line and a half in breadth, and its point is to be entered in the sclerotic about half a line from the cornea. It is then to be directed downwards towards the centre of the pupil, until its point has advanced about 3.5''', when it is to be carried directly across, and the counter-puncture made at about the sclero-corneal junction, making an incision of from 4''' to 4.5''', 3.5''' of which will probably lie in the cornea, the remainder in the sclerotic.

"The second step is the iridectomy, as you see represented in the second drawing. I would remark in this connection that one of the class asked me the other day why the iris was cut off, and I would now reply that it is from necessity, as, owing to the peripheral nature of the incision, the iris will prolapse. I would advise the iris to be severed rather by several cuts of the scissors than by one, as thereby it will be removed closer to its ciliary attachments. By all means, now use this tortoise-shell curette, tapping the cornea gently, to cause the iris to contract, and thus clear the track of the wound. In the third diagram you see the capsule being lacerated by the cystotome, which I here show you. This is to be introduced gently between the lips of the incision, well down to the lower border of the iris, the point then turned against the capsule, which is to be lacerated by two longi-

tudinal strokes on each side, and completed by one or more transverse ones. Now we are ready for extraction, which is to be performed thus: The convexity of the shell-scoop is to be gently pressed against the lower portion of the cornea in a direction backwards and upwards, when the lens will in most cases readily slip out.

"The great danger in all cases of extraction is from prolapse of the vitreous humor, owing to rupture of the ciliary ligament, as, from disease of this structure, the gentlest pressure will sometimes break it. Again, this accident may be owing to a watery condition of the vitreous, so that everything gushes out when the least pressure is made. In such cases there is no use in persisting in the attempt to extract by continued pressure, as this only makes matters worse, since the lens is the most resisting portion. The instrument that I show you, a flat scoop, should be gently introduced behind the lens until it reaches its inferior border, when it is to be carefully lifted out. If all goes well, when the extraction is completed, bandage the eye carefully with a flannel roller. By all means see your patient the same evening, when, even if all is well, he will probably complain of slight burning pain or discomfort in the part. If this be excessive, open the eye a very little, to allow any aqueous humor to escape that may have collected. If the pain prove still more intense, with considerable ciliary neuralgia, give a hypodermic injection of morphia. If still worse again, with swelling of the lids, and great pain, either a few leeches or moderate venesection will be proper.

"Some recommend, especially Von Graefe, that if any trouble of this kind occurs within the first twelve or fifteen hours, when there is always most danger, the outside of the lids should be painted with a strong solution of nitrate of silver, or that the solid stick should be applied, and afterwards neutralized with common salt. If, worst of all, suppuration of the cornea supervenes, remove the bandage every three or four hours and bathe the eye for a few minutes with warm chamomile tea, and give good food, tonics, etc. These cases generally do badly.

"Be careful never to give a favorable prognosis in cataract cases, as patients will expect four times as much as you promise. You can tell them that there are nine chances to one in their favor. The patient before us can console himself with the fact that in his present condition his eye is useless for vision, so that even with a bad result he will be no worse off than at present, while he has nine chances to one of success."

Dr. Strawbridge then proceeded to extract, with perfect success. The cataract was a little over-ripe, and he remarked that when there remained behind any of the cortical substance, the best way to remove it was by gently rubbing the closed lids upwards in the direction of the incision. Immediately after the operation, although before it the patient had to be led into the amphitheatre, he could count fingers easily at a distance of two or three feet.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC OF PROF. S. D. GROSS, DEC. 6, 1871.

Reported by Ralph M. Townsend, M.D.

LITHOTOMY.

A BOY, aged 10 years, from Scranton, Pa., was sent to the clinic on November 1, to be treated for irritable bladder. After the usual interrogation, it was concluded that the patient suffered from urinary calculus, and with a view of determining this a few whiffs of chloroform were administered, and a sound introduced into the bladder. No stone was revealed. Prior to subsequent examinations the boy was placed upon the following treatment:

R Uvae Ursi, $\mathfrak{z}\text{ij}$;
Sodæ Bicarb., $\mathfrak{z}\text{ijj}$. M.

S.—Add to one and a half pints of boiling water, and take a wineglassful two or three times daily.

As the patient had been the subject of pain for nearly nine years, and as the operative procedures just instituted would doubtless augment the same, after recovering from the influ-

ence of the chloroform, twenty-five drops of laudanum were ordered as an injection; and the patient was also directed to have ten grains of Dover's powder at bedtime.

November 4.—A day after the adjournment of the last clinic, Prof. Gross, with the aid of a larger sound, succeeded in finding a calculus; and to-day the boy is again brought before the clinic for the purpose of having performed the operation of lithotomy.

Many operations for stone in the bladder have been devised, as the lateral, bilateral, median, medio-lateral, recto-vesical, and supra-pubic. The former of these was selected for this case, being characterized by the operator as the perfection of lithotomy.

The patient had been subjected to a certain degree of preparatory treatment, such as perfect rest, a good aperient, and retaining his urine for a certain number of hours previous to the operation.

Upon being fully under the influence of chloroform he was drawn to the foot of the table, the legs flexed, and the thighs widely separated by two assistants. A staff, twelve inches long, with a good wide groove, was then introduced into the bladder, and so held that while the handle should incline towards the right side, it should simultaneously form a right angle with the trunk. The curved portion of the staff was held closely up against the pubic symphysis, the staff-holder standing on the left side of the patient, and with his disengaged hand holding the scrotum out of the way.

The index-finger of the operator was then well oiled and introduced into the rectum, for the double purpose of causing its muscular fibres to contract, and at the same time to ascertain accurately the bearings of the hidden surroundings,—to sound the parts as it were. The knife was then entered by the side of the raphé, on the left of the perineum, about an inch above the margin of the anus, and carried obliquely downwards and outwards, between the anus and the tuberosity of the ischium,—the length of the incision being about two and a half inches. The incision was carried down to the membranous portion of the urethra, a little in front of the prostate gland. The index-finger of the operator's left hand was then introduced in the gap, as a searcher for the groove on the staff. The knife, guided by the finger, was now introduced into the groove of the instrument, and carried on, through the left lobe of the prostate, into the bladder, care being taken not to carry the incision too far back, for fear of wounding the venous plexus at the base of the bladder, or of penetrating the reflection of the pelvic fascia.

A gush of urine followed the opening of the bladder, the knife and staff were both withdrawn, and the forceps were introduced into the bladder through the wound, being guided by the index-finger, which latter had not been withdrawn since its first insertion. The gush of urine having forced the stone down against the artificial opening, it was readily grasped, and without difficulty withdrawn.

The calculus was of the form of a flattened oval, brown in color, and possessed of a smooth surface. It belonged to the prevailing species of formations of this kind, consisting principally of lithic acid.

The external perineal artery, and several of the smaller perineal vessels, required ligation. A sponge, secured by a piece of twine tied around the thigh, was plugged in the wound, and retained at different intervals, for forty-eight hours. Dr. Physick wounded the internal pudic artery in the first case of lithotomy he had, and the accident induced the train of thought which resulted in the invention of the curved forceps and needle to ligate injured arteries when deeply seated.

November 25.—This little patient was brought before the class for the last time preparatory to being taken home. His wound is almost closed, and all the water escapes by the natural channel. Briefly, his after-treatment was as follows: After the extraction of the stone the bladder was well syringed out, and then the patient was put to bed and given a full anodyne. Little attention was paid to posture, the assuming of that which seemed the most easy being allowed. The diet for the first few days was light and unirritating, consisting principally of rice, crackers, toast, and tea. A dose of castor oil was given at the end of the first week. The urine commenced to pass off permanently by the urethra about the fifteenth day after the operation.

OTORRHEA.

Carrie M., aged 17 years, had a polyp removed from her ear six months ago, but has suffered with a discharge from her ear since she was a year old. The discharge is very offensive.

This is a disease most common in strumous subjects, or those whose system is connected with a peculiar taint. It is an affection that soon becomes obstinate to the parts, and is extremely difficult to dislodge, continuing for months, and in its course destroying the tympanum, the bones of the ear, and portions of the temporal bone; and ultimately the membranes of the brain may be attacked, and death result.

For examining the ear, Wilde's or Toynbee's speculum, Miller's lamp, or the apparatus devised by Dr. Grant, of New Jersey, may be used.

Examination of this patient reveals the membrane of the external auditory meatus much thickened, and the floor of the meatus bathed with a thin, watery discharge. There is a good deal of epithelial matter in the tube, whereby the light is prevented from falling upon the bottom of the ear. The treatment in a case of this kind should be steady and long-continued.

The general health in this case is undermined, the patient suffering greatly with headache on the affected side.

After the ear is well washed out with tepid water, the following solution will be applied with a camel's-hair brush, once daily, until the discharge is materially lessened; and after that every third or fourth day, as the case may require:

R Argent. Nit., gr. x;
Aque, f3j. M.

A blister will also be applied behind the ear, to be renewed every eight or ten days.

This patient will also take in pill form three times daily,—

R Ext. Cinchonæ, gr. ij;
Ferri Iodid., gr. ½;
Hydrarg. Chlor. corros., gr. ʒi. M.

The diet will be unstimulating, yet at the same time nutritious and easy of digestion. All red meats and coffee should be forbidden; but oysters, eggs, poultry, milk, tea, stale bread, and fresh fruits may be liberally partaken of. The patient will also take ample exercise in the open air, guarding herself from cold by wearing flannel next to the skin.

POTT'S DISEASE.

Alfred B., aged 5 years, is hump-backed, has been in this condition for two years, and has never been confined during all that time! This case and its already deplorable results should be photographed on every observer's brain, for this child is crippled for life, and is a monument no less to bad treatment than to want of common sense. No doubt this little sufferer in the incipency of his trouble presented all the signs and symptoms so characteristic of his complaint,—a little projection under the skin of one of the spinous processes of the affected vertebrae, slight increase of abdominal prominence, and a halting gait or walk, very much like that of a chicken in hot weather when its wings droop and its mouth hangs open.

This condition depends upon disease of the bodies of the vertebrae,—usually the dorsal. The affection is essentially of a scrofulous character, or is a remote outgrowth of a syphilitic state of the system.

Confinement in the recumbent posture, as soon as the nature of the disease is recognized, must be insisted upon, the patient not being permitted to rise either to void his secretions or for any other purpose.

When the child is robust, the lecturer said, he sometimes promoted pyogenic secretion by the application of the actual cautery. In anæmic or asthenic cases the tincture of iodine would be more relied upon. A cure is ultimately effected at the end of seventeen, eighteen, or nineteen months, by the absorbents taking up the diseased structure, and an effusion of plasma bridging over the resulting gap. When the boy rises from his bed, he must wear an apparatus to bear the weight of his head and shoulders.

OBSERVATIONS ON THE RED BLOOD-CORPUSCLE.—Dr. E. Ray Lankester (in the *Quarterly Jour. of Micr. Science* for October, 1871) presents a series of experiments chiefly with regard to the action of gases and vapors on the red blood-corpuscle, and concludes that the red blood-corpuscle of the vertebrata is a viscid and at the same time elastic disk, oval or round in outline, its surface being differentiated somewhat from the underlying material, and forming a pellicle or membrane of great tenuity, not distinguishable with the highest powers (while the corpuscle is normal and living), and having no pronounced inner limitation. The viscid mass consists of (or rather *yields*, since the state of combination of the components is not known) a variety of albuminoid and other bodies, the most easily separable of which is hæmoglobin; secondly, the matter which segregates to form Roberts' macula; and thirdly, a residuary stroma, apparently homogeneous in the mammalia (excepting so far as the outer surface or pellicle may be of a different chemical nature), but containing in the other vertebrata a sharply defined nucleus, this nucleus being already differentiated but not sharply delineated during life, and consisting of (or separable into) at least two components, one paraglobin, precipitated by CO₂, and removable by the action of weak NH₃; the other pellucid and not granulated by acid.

The chemical differentiation of the outer pellicle is rendered probable by the behavior of the corpuscle under weak NH₃, which appears to dissolve this pellicle, and so loose the viscid matter from that which restrained it to its oval shape; also from the inability of CO₂ to act on the corpuscle until it has been subjected to the influence of aqueous vapor, which may be supposed to remove or render permeable this pellicle; also from the action of chloroform, oil, and cyanogen, which cause the discharge or diffusion of the hæmoglobin from the corpuscle, perhaps by first removing or rendering permeable—at any rate modifying—this outer pellicle.

Steam, chloroform, benzine, bisulphide of carbon, ammonia, and cyanogen act on the red corpuscle so as to cause the escape of the hæmoglobin.

The further action of these reagents causes the elimination of what may be called Roberts' constituent, that which is stained by magenta and set by tannin.

A still further action of chloroform, of water, or of ammonia dissolves first the stroma, lastly the nucleus.

Carbonic oxide and sulphuretted hydrogen produce their respective changes on the hæmoglobin as demonstrated spectroscopically without altering the form of the corpuscle, merely affecting the radiation of its body.

THE VARIATIONS IN THE COLOR OF CERTAIN FISH.—M. George Pouchet (*L'Institut*, November 1, 1871) believes that the physiological mechanism by which certain fish take the color of the bottom on which they live, has its centre in the brain, and is set in motion by the impressions made upon the retina by the circumambient medium. The fish does not assume precisely the color of the bottom or of the medium in which it lives, but it has the power of adapting the color of its surface to the tone of the medium. These changes may be made in a few minutes, and are due to the contraction or dilatation of pigment cells (chromoblastes) scattered under the skin of the animal, the former making it light, the latter dark in color. If the eyeballs be removed, the fish loses this power, and assumes an intermediate shade. The section of the spinal cord seemed to exercise no influence upon this function, but, on the other hand, the division of the trifacial was immediately followed by paralysis of the chromoblastes of all parts of the head under the influence of this nerve. A similar result followed the section of the spinal nerves, and it was possible in this way to give a zebra-like appearance to the fish. The destruction of the grand sympathetic nerve at a point in its course in the lower part of the spinal column gave rise to an immediate paralysis of all the chromoblastes in the skin behind this point, and during the few days that the fish operated upon survived the operation, it was half black and half light-colored. The paralysis caused by the section of the trifacial or spinal nerves will persist for weeks.

REMOVAL OF THE TONGUE.—Mr. MacGillivray, Surgeon to the Bendigo Hospital (*Medical Record*; from the *Australian Medical Journal*), reports the successful removal of the whole tongue for epithelioma.

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EDITORIAL.

CONDURANGO.

CONDURANGO was first brought to the notice of the medical profession last April by Mr. Fish, the Secretary of State, who, in consequence of representations as to its usefulness in the treatment of cancer, syphilis, and other diseases, made to him by Señor Flores, the Minister of Ecuador at Washington, and corroborated by Mr. Wing, our Chargé-d'Affaires at Quito, sent a sample of it to Mr. Robeson, the Secretary of the Navy, with the request that he would "cause it to be administered by the Medical Staff of the Navy." At the same time a quantity of it was sent to New York surgeons, in order that its value as a remedial agent might be tested by them. Although we are disposed to question the right of Mr. Robeson, or of any other civil officer without medical education and uninformed as to the therapeutic properties of drugs, to cause any medicine to be administered by the Medical Staff of the Navy, or by any other body of medical men, we pass this question by, as unimportant to the end we have in writing this article, which is to show that all, with the exception of one physician,—and he has a large pecuniary interest in the sale of the drug,—who have treated cases of cancer with condurango, have declared that the disease is uninfluenced by it.

So far as we have been able to learn, no report has been made by the surgeons of the navy; and the report made by the New York surgeons has been withheld from the public by the Department of State at Washington, but it is very well known to be unfavorable. More recently, however, the remedy has been extensively prescribed, both in this country and in England, by physicians well qualified to judge of its medicinal virtues, all of whom, except Dr. Bliss, declare that it is worthless so far as the treatment of cancer is concerned.

In an article which was published in the *New York Medical Journal* for July, a synopsis of which was given in the *Miscellany* of this journal for August 1, Dr. Bliss reported three cases of cancer in which he asserted that great improvement had followed the use of condurango; but we remember having thought at the time we read the article that it had been written rather with the view of impressing the laity than of laying before the profession the results of careful observations.

Choosing for the subjects of two of his experiments the mother of the Vice-President and the wife of the Secretary of the Senate, and for the third a lady in Washington, he gave their names in full; and in one instance, instead of giving in his own words the account of the improvement that is said to have taken place, he inserted into his article a letter, written by the husband of the lady, and, of course, more intelligible to people generally than the technical description by a physician. It is, therefore, not improbable that even at this time Dr. Bliss thought of abandoning his profession and of engaging in commerce. He appears to have secured the monopoly of the article, which he is still able to sell at extortionate prices, for there are many persons in this community who have heard only the favorable reports in regard to it, or, sharing the vulgar prejudice that physicians are jealous of one another, believe that the writers of unfavorable reports are influenced solely by an ungenerous feeling towards Dr. Bliss, who it is thought has a *good thing*. To such persons we would say that at least four deaths from cancer treated with condurango, including one of Dr. Bliss's own patients, are known to have taken place.

We do not doubt that Secretary Fish was actuated by the best motives in attempting to introduce condurango into this country, and it is even possible that he may have thought he had discovered a specific for the numerous morbid processes included under the general term of cancer; but we think it is now full time that he had published all the reports in his possession, of whatever character they may be, since by their suppression he appears to be extending the patronage of the State Department to those who are taking advantage of it to enrich themselves.

LEADING ARTICLES.

THE DEATH-ROLL OF 1871.

WITH the happy, joyous greetings of the New Year mingle tender sentiments of respect and admiration, as we pause to pay a tribute to the memory of the honored dead of 1871. If we believe, with the great novelist, whose own recent loss cast a gloom over the civilized world, that "of every tear that sorrowing mortals shed on such green graves, some good is born, some gentler nature comes," may we not hope that such kindly influences will permanently bless the profession which in their lives they adorned and illustrated?

In *January* last, on the first day of the year, died at Philadelphia, where for many years he had lived in retirement from professional labor, at the age of 76, one of America's most distinguished surgeons of a third of a century ago, Dr. JOHN RHEA BARTON. To all students and practitioners of surgery especially the remembrance of his achievements in the art in which for too brief a period he shone so brilliantly will be perpetuated in the fractures and bandages to which his name has been prefixed. About the middle of this

month also died, at the early age of 29, Dr. EDWARD RHOADS, the first editor of this journal, around the memory of whose moral worth and professional excellence affectionate associations still warmly cluster. Dr. GEORGE T. ELLIOT, Professor of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College, and a well-known practitioner, writer, and lecturer on subjects to which he brought the benefit of his professional skill and culture, also died in January, at the age of 43. The name of Dr. THOMAS MAYO, aged 81, at one time President of the Royal College of Physicians of London, and the author of valuable contributions to medical literature, and medical psychology especially, may also be added to the obituary list of this month. His chief productions were the "Elements of the Pathology of the Human Mind," "Clinical Facts and Reflections," and one or two works on "Medical Testimony."

Chemistry lost in *February* one of its most distinguished exponents, Dr. JAMES SHERIDAN MUSPRATT, at the age of 50. Originally a pupil of Liebig, he afterwards became Professor of Chemistry in the college he himself founded at Liverpool, England, and the author of a "Dictionary of Manufacturing Chemistry" and other valuable works. The well-known and very successful lithotomist, WILLIAM KEITH, of Aberdeen, aged 68, whose experience in this specialty was probably greater than that of any other surgeon of his day, died about the same time. In addition to his principal essay on "Lithotomy" and his practical contributions to periodical literature on the same subject, he published, in 1867, in conjunction with Dr. Pirrie, a small work on "Acupressure." It is seldom that we are called upon to record the loss of so many-sided a physician as Dr. JOHN ADDINGTON SYMONDS, of London, aged 63, formerly President of the British Association, who was not only learned in the profession of his choice, but was also a classical scholar of rare attainments, equally at home in the florid walks of general literature and in the no less attractive paths of medical science. Dr. HIPOLYTE ROSSIGNOL, aged 54, Professor of Legal Medicine, Toxicology, and Operative Medicine in the University at Brussels, better known on account of his valuable investigations on the structure of the lungs and the pathology of asthma, also died in February. The death of Dr. ALBRECHT WAGNER, of Prussia, like that of the distinguished Niemeyer a month later, resulted from disease contracted in the service of his country. He was the author of works on "The Process of Repair after Resection and Extirpation of Bones" (a translation of which by Mr. T. Holmes was published by the New Sydenham Society in 1859), "Resection of Nerves," "Hydrophobia," etc.

On the 14th of *March* died at Tübingen, in the fifty-first year of his age, the distinguished scholar and clinical teacher, FELIX VON NIEMEYER, one of the great representative medical men of modern Germany. The immense amount of overwork inseparably associated with his responsible services in the late European conflict rapidly told upon a constitution already weakened

by ardent devotion to the labors of his profession. Commencing his career as an author during the cholera epidemic of 1848-49, he in 1858 published his great work, "Lehrbuch der speciellen Pathologie und Therapie," which at the time of his death had passed through eight editions. A translation of his "Clinical Lectures on Pulmonary Consumption" was published by the New Sydenham Society in 1870. He was at the time of his death Professor of Clinical Medicine in the University of Tübingen, and was celebrated for his instructive, practical, and suggestive clinical researches and teachings. His name will be permanently associated with the history of the advancement of clinical medicine which has made the last decade memorable. Professor BAUMÈS, of Lyons, aged 79, who also died in March, was famous about thirty years since as the opponent of Ricord, and his views on venereal diseases were embodied in a work published in 1840, entitled "Traité des Maladies vénériennes," which gave him a great deal of prominence on account of the collision in which it brought him with the opinions of that distinguished specialist. He was also conspicuous as a clinical teacher and practitioner; and by his "Traité des Maladies de la Peau," published in 1843, he still further increased his reputation as a pathologist. Professor PIETRO LAZZATI, of Milan, was in his lifetime the ruling spirit of the great Lying-in Hospital of that city, and one of the shining lights of the Italian school of obstetrics. He was the author of several valuable monographs, the best-known of which is that on "The Mechanism of Labor by the Shoulder," which has been described as "a picture from life drawn by the hand of a master." The sudden death of Dr. CHARLES MEYER WETHERILL, the very able Professor of Chemistry in the Lehigh University at South Bethlehem, Pa., was a serious loss to the scientific world. A thorough chemist, with whole-souled devotion to his profession, he would doubtless have risen to still greater distinction, with the more extended opportunities that were in store for him.

The month of *April* is memorable for the loss of the great Austrian clinical teacher, Professor JOHN OPPOLZER. When Skoda retired from the Vienna School, he left a blank that was not easily filled; but it must have been a heavy blow to the cause of science and to the interests of that important institution when his colleague was removed by the hand of death from his sphere of extraordinary usefulness. Prof. Oppolzer had been successively Clinical Professor at Prague, Leipsic, and Vienna, in which last city he had for fifteen years been distinguished as a practitioner and a teacher, being no less remarkable for his great powers of diagnosis than for his therapeutic accuracy and skill. It has been said, in illustration of his earnest and thorough devotion to his profession, that he scarcely ever failed to be present at a post-mortem examination of a patient under his charge during thirty years of continuous hospital labor. His loss was a calamity to the medical world. The death of Dr. DAVID H. TUCKER, Professor of the Practice of Medicine in the Medical College of

Virginia, and formerly Professor of Midwifery in the Franklin Medical College of Philadelphia, must also at this time be recorded.

FRANÇOIS ACHILLE LONGET, aged 68, the eminent physiologist, died at Bordeaux in *May*, it is said "broken-hearted at finding the city where he had spent the greater part of his laborious and useful life abandoned to the tender mercies of the Revolution." Nearly a third of a century since, with the distinguished Matteucci, he made valuable researches on the irritability of the nervous system. In 1843-46 he published his celebrated "*Traité d'Anatomie et de Physiologie du Système nerveux de l'Homme et des Animaux vertèbres.*" In the ensuing year he gave to the world equally interesting papers on physiology, especially on the nervous system. From 1850 to 1855 he was occupied with the publication of his excellent "*Traité complet de Physiologie.*" This was his last large work, although he continued until a much more recent date to contribute valuable material to all the leading scientific and medical periodicals of the day. The distinguished octogenarian electrician, ANTOINE CÉSAR BECQUEREL, also died about the same time. His great work on Electricity and Magnetism, in seven large octavo volumes, was published about a third of a century ago. He was a remarkably prolific writer, contributing an immense amount of scientific matter to the literature of the times and to the transactions of learned societies. Among his best works we may particularly specify his treatise on "*Physics in its Relation to Chemistry.*"

LIONEL JOHN BEALE, who died in *June*, aged 75, possessed strong literary tastes and wrote numerous useful treatises, including investigations on "*Spinal Diseases,*" "*Laws of Health,*" "*Health and Longevity,*" "*Personal and Domestic Hygiene,*" etc. His abilities shone in the refined walks of the arts, in philology, ethnology, etc., rather than in the more arduous labors of professional life, and his views were liberal and denotive of culture and good taste. He was the father of a no less worthy son, Dr. Lionel S. Beale, whose own literary and scientific achievements have given him deserved prominence.

Dr. THOMAS HAWKES TANNER, who died at Brighton, England, in *July*, at the early age of 46, was well known in this country, not only as a frequent contributor to medical journals, but also as the author of a "*Manual of the Practice of Medicine,*" which passed through several editions, an "*Index of Diseases,*" "*Diseases of Infancy and Childhood,*" "*Signs and Diseases of Pregnancy,*" and other useful and practical works. Professor GEORGE C. BLACKMAN, of Cincinnati, who died at the age of 52, was one of the most distinguished of our Western surgeons, being not only an operator of boldness, experience, and skill, but also a brilliant clinical teacher and lecturer.

In the month of *August* died, at the early age of 47, Dr. HYDE SALTER, of London, whose name is universally familiar to the profession in connection with the best treatise on asthma that has appeared in any language. Himself a martyr to it through a long series

of years, he was able vividly to portray his own sufferings in the accurate pictures he drew of the morbid condition upon which they depended. In 1851 his excellent notes of Dr. Todd's clinical lectures were embodied in the latter's well-known work on Clinical Medicine. He was editorially interested in the "*Encyclopædia of Anatomy and Physiology,*" the articles "*Pancreas*" and "*Tongue*" being written by him and beautifully illustrated by his facile pencil; and his valuable assistance was called into requisition in connection with Todd and Bowman's *Physiology*. He was also an excellent clinical teacher, and many of his lectures and essays gave additional force and value to the medical periodical literature of the day; but his work on Asthma will be a permanent monument of his literary culture and professional skill.

In *September*, another of the extensive series of authors and practitioners whose ranks during the year were so fatally invaded was lost to science. SAMUEL SOLLY, aged 66, a prominent surgeon, though hardly ranked as worthy to occupy a foremost place in the brilliant galaxy of illustrious British hospital surgeons, was better known in this country as the author of a work "*On the Human Brain, its Structure, Physiology, and Diseases,*" which was republished here, although his "*Surgical Experiences*" and "*Analysis of Müller on the Glands*" are not unfamiliar to medical readers. Prof. ROBERT BENTLEY, very prominent as an author and lecturer on botany, and for his scientific and literary attainments, died at London, at the age of 50. He was Professor of Botany or Materia Medica, or lecturer on both combined, in King's College, to the Pharmaceutical Association of Great Britain, and to the medical colleges attached to several of the London hospitals, President of the British Pharmaceutical Congress in 1865 and 1866, one of the editors of and a constant contributor to the *Pharmaceutical Journal*, the author of a "*Manual of Botany,*" and, in conjunction with two other members of the profession, edited Pereira's *Manual of Materia Medica and Therapeutics*, after the lamented death of its distinguished author. Dr. JOHN EDWARDS HOLBROOK, for many years Professor of Anatomy in the Medical College of South Carolina, died at Norfolk, Massachusetts, aged 76. Natural history was his favorite study, and in its charming walks he not only created a genuine enjoyment and reputation for himself, but he also contributed to literature his excellent work on "*Reptiles,*" published in Philadelphia about thirty years since.

The profession in England lost in *October* two of its members, who, though not in the latter years of their lives prominently brought to the surface of popular notice, once contributed valuable materials to medical literature. Dr. RICHARD T. EVANSON, aged 72, in conjunction with Dr. Maunsell, wrote, a third of a century ago, the first really excellent treatise up to that date issued "*On the Management and Diseases of Children.*" LANGSTON PARKER, 66 years of age, was the author of works on "*Comparative Anatomy,*" "*Diseases of the Stomach,*" and "*Cancer;*" but his best

work is that on "Syphilitic Diseases," which passed through several editions. American editions of the latter, and also of that of the two associate authors just referred to, appeared at the time, that of Parker in the "Library" department of Prof. Dunglison's "American Medical Library and Intelligencer."

The necrological record of the year would be incomplete without an allusion to the losses sustained during the year just past by the profession at home in our own city. Death has not invaded the ranks of the writers and teachers of medicine, but has stricken down several useful and valuable lives among those who had devoted themselves to its arduous practice. Without any attempt to make the list complete, we may mention, in addition to those already referred to, the names of Drs. EDWIN SCHOLFIELD, JAMES M. GREENE (U.S.N.), MORRIS C. SHALLCROSS, JOHN GEGAN, J. BURTON MUSTIN, CHAS. R. PARVIN, ELIAB WARD, and CHARLES NEFF. To this list may be added the name of Dr. N. D. BENEDICT, formerly Superintending Physician of the Philadelphia Almshouse, and afterwards of the New York State Lunatic Asylum, who had resided in the South for a score of years. He was the author of a "Compendium of the Practice of Dr. Nathaniel Chapman."

R. J. D.

THE BURN BRAE.

WERE we asked to adduce one of the strongest proofs of advancing civilization on the side of enlightened humanity in the present age, we would point to the improvement in the treatment of the insane. Not to speak of what has been accomplished in this way in Europe, our own country can boast of noble institutions for the benefit of the increasing number of those unfortunate persons who are bereft of their reason,—smitten with madness. Much, however, yet remains to be done to meet the requirements for the proper care-taking of the insane poor, who are still too much neglected, or suffer from maltreatment. Private asylums for the insane have long been in existence, but they have not escaped harsh censures for abuses in their management, which have been made the subject of a sensational novel by a popular English writer of the day. It gives us, therefore, the more pleasure to speak of Burn Brae, a "Private Hospital for Mental Diseases," in the neighborhood of Philadelphia, which may well be regarded as among the highest of its class. The corporate institutions of our city, the Pennsylvania Hospital for the Insane, and the Friends' Asylum for Persons Deprived of the Use of their Reason, are well and advantageously known through their annual reports; and it has been left to the Burn Brae, formerly named Clifton Hall, without extraneous aid, to gain for itself a reputation by its being thrown open to the inspection of all interested inquirers, and especially of a number of medical gentlemen, who expressed their entire satisfaction of the adaptedness of the establishment to the object proposed.

The separation of the insane from their families, and their removal from their homes, which are indispensable measures for their recovery, should have as many compensating circumstances as possible in the establishments to which they are to be taken. Seclusion without obvious restraint, quiet without dulness, variety of objects and fitting company without undue excitement, ought to be secured for them in their new homes. These ends can be best reached in a retreat for the insane, the superintendent of which charges himself with only a small and limited number of patients, who will constitute a family, with the several members of which his intercourse will be friendly and confidential. He is always at hand to note every change in their mental disorders and infirmities, and to shape his treatment accordingly. He enjoys another advantage of great importance in his having continually under his eye the personal attendants on the insane and being able to keep them to the faithful and vigilant discharge of their duty. It may be stated on this occasion that just now the tendency of medical opinion, of which the late Sir James Simpson was a conspicuous representative, inclines to the erection of small hospitals of every kind,—cottage hospitals, as they are called in England.

The Burn Brae is situated within a few miles of Philadelphia,* in a district of country remarkable for the purity of its air and the varied prospects presented by its undulations of hill and valley and interspersed woods. The house was erected under the direction of Dr. Robert A. Given, its medical superintendent and proprietor. It is so constructed as to give pleasant quarters for forty patients, each of them having his or her own room, well aired and lighted and opening on corridors with similar advantages. An intelligent lady, as matron, devotes her time exclusively to the care-taking of the lady patients. On the gentlemen's side, Dr. Given has an able assistant, ready for any emergency.

Were a stranger, not knowing beforehand the nature of the establishment, to visit the Burn Brae and be shown through it and traverse its corridors and look in on the neatly-furnished parlors and chambers, he would believe himself to be in a boarding-house of the first class, and wish that he and his family could procure for themselves such accommodations as those now before him. Nor would the illusion be dispelled were he to be invited to a seat at the dinner-table, at the head of which the hospitable superintendent always presides, and on both sides of which are the inmates of the house who are able to leave their rooms. The more infirm, and those who may happen to be too excited to take their place at the table, are served at the same time and with the same abundance as the others,—the daily supply consisting of some one of the best meats, or poultry, or fish, and fresh vegetables from the garden. The dessert consists, for the most part, of the best fruits of the season. We are the more minute in speaking of

*The house is a little in retreat from the old Baltimore turnpike, in front of and a very short distance from Oak Lane Station, on the Media and West Chester Railroad. The post-office is at Kellyville, Delaware County.

the fare in this house, as so much depends on abundant and wholesome nutriment, varied from day to day, for the successful treatment of chronic diseases.

From whatever side of the home one looks out, the eye is greeted with Nature's livery,—the never-tiring green, of every hue. The diversified features of the grounds—the lawn in front, with its old trees, shrubbery, flowers, and fountains, sloping down to a miniature lake, and a thick grove beyond—invite to health-restoring walks. The view from the window in the rear of the house extends over meadow, field, and strips of woods to the not distant Delaware and the blue hills of Jersey beyond. In this retreat, thus favored by nature and improved by art, not only the admittedly insane, but also they whose minds, by overmuch toil and overwrought feelings, have become jaded and worn, may find rest and recreation, and recover their lost energies and buoyant hopes.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY, NOVEMBER 23, 1871.

THE PRESIDENT, DR. J. H. HUTCHINSON, in the chair.

DR. W. G. PORTER presented a specimen of *aneurism of the aorta following popliteal aneurism*, removed from W. M., black, fifty-three years of age, and for several years past a porter at the Masonic Hall. He had always enjoyed good health until about three years and a half ago, when he noticed a pulsating tumor on the left leg, in the region of the popliteal artery. The tumor increasing in size incapacitated him for work, and in the autumn of 1868 he sought the advice of Prof. Gross, who pronounced the tumor an aneurism, and advised the ligation of the femoral artery. The operation was accordingly performed, and he made a good recovery, and afterwards enjoyed good health, being able to attend to his work until about six months ago, when he began to suffer from dyspnoea on exertion, and noticed that his feet were swelling. He was treated by several physicians without relief, and finally, about the middle of October last, he became a patient of the Philadelphia Dispensary. On visiting him, Dr. Porter found him lying in bed on his left side, and suffering considerably with shortness of breath, which was increased when he attempted to lie on his right side or on his back. The respiration was stridulous. There was no difficulty in swallowing, and occasionally he had a hacking cough. Both lower extremities were very much swelled, and pitted freely on pressure. There was some fluid in the abdominal cavity. The left side of the chest was much more prominent than the right, and the left side of the face was more oedematous than the right. The conjunctiva of the left eye was considerably congested and injected. The pupils were equal and natural. No arterial pulsation could be detected on the left side of the body in either the carotid, facial, temporal, axillary, brachial, radial, or ulnar arteries. There was no evidence on auscultation of a tumor about the neck or front of chest; the examination, however, could not be very thorough, on account of the condition of the patient. No thrill or murmur could be detected. The urine was scanty and contained albumen. The patient suffered extremely on account of the dyspnoea, which increased in spite of everything that was done for him; and, growing weaker and weaker, he finally died, exhausted, on the 17th of the present month.

The post-mortem examination was made about forty-eight hours after death. On opening the chest, the left side was found almost completely filled with fluid, the lung being forced away from the chest-wall, except at two or three points

where it was adherent, forming teat-like projections, which could still be seen. There was a small amount of fluid in the right side of the chest. The heart was enlarged, but its valves were healthy. The aorta was enlarged and extensively atheromatous. About the junction of the arch with the thoracic aorta an immense aneurism had formed, which was almost completely filled by a hard, firm clot, and which, extending laterally and backwards, had eroded the bodies of the second, third, and fourth dorsal vertebrae, and had removed the periosteum of the corresponding ribs. The left subclavian and carotid arteries were entirely occluded; the other branches of the arch were enlarged. The kidneys were granular and contracted.

The popliteal aneurism and part of the artery above and below were removed, and present the following appearance: The aneurism is entirely obliterated. The artery below the seat of aneurism is a fibrous cord; above it is patulous.

BIOLOGICAL AND MICROSCOPICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES.

MONDAY, DECEMBER 4, 1871.

W. S. W. RUSCHENBERGER, M.D., in the chair.

DR. JAMES TYSON called for the final reading of his resolution to amend the Regulations, as follows: "Resolved, that Article XVII. of the Regulations of this Section be amended so as to read, 'The stated meetings of the Section shall be held on the first Monday in each month, except July and August, at such an hour as may be fixed by the Section.'"

In explanation of this proposed change from semi-monthly to monthly meetings, Dr. Tyson remarked that the number of actual working-members had during the past year become so small, and they were, during the winter months, so occupied with various professional engagements, that it seemed impossible to secure from them contributions for each of twenty meetings yearly. He was certain that sufficient devotion to microscopical science still remained among us to supply interesting material for the reduced number of ten meetings per annum.

After discussion by Drs. Hunt, McQuillen, Tyson, and others, the resolution was unanimously adopted.

It was agreed that the Recorder be directed to announce upon the notices of the meetings the title of the paper to be read at the ensuing meeting, with the name of the author.

The election of officers for the year 1872 was then proceeded with, and resulted in the choice of the following gentlemen:

Director—W. S. W. Ruschenberger, M.D.

Vice-Director—James Tyson, M.D.

Recorder—Joseph G. Richardson, M.D.

Corresponding Secretary—J. H. McQuillen, M.D.

Treasurer—Isaac Norris, M.D.

Conservator—William H. Trueman, D.D.S.

At an informal conference of the members subsequent to adjournment, Dr. J. G. Richardson was appointed to present a paper for discussion at the meeting to be held on Monday, January 8, 1872, and proposed to offer some remarks upon "Certain Parasitic Fungi and their Relations to Disease."

REVIEWS AND BOOK NOTICES.

A TREATISE ON LOCALIZED ELECTRICITY AND ITS APPLICATION TO PATHOLOGY AND THERAPEUTICS. By Dr. G. L. DUCHENNE. Translated from the Third Edition of the Original by HERBERT TIBBITS, M.D., Licentiate of the Royal College of Physicians, London; Medical Superintendent of the National Hospital for the Paralyzed and Epileptic. With numerous Illustrations, and Notes and Additions by the Translator. 8vo, pp. 322. Philadelphia: Lindsay & Blakiston, 1871.

Of late years a considerable number of books on medical electricity have been published, among the most prominent

which in the English language are the works of Althaus, Moritz Meyer (translated by Hammond), and Morgan, besides numerous others in German and French. The difficulty with most of these is that they are too exclusively scientific, and give the practical points too little attention, to be of much value to most general practitioners, of whom the majority find it necessary at times to make use of electricity for medicinal purposes, and consequently require some text-book for reference.

This volume of M. Duchenne, however, which is in its third edition,—the first having been published in 1855 and the second in 1861,—is eminently practical, and is written in so clear and distinct a style that it will be available for even persons with but little previous knowledge of electricity. Moreover, the reasonable price for which it can be obtained will induce many who are not specially interested in the subject to purchase it.

The translator, Dr. Tibbits, is well fitted for the work, from the large experience he must have had in electro-therapeutics through his connection with the National Hospital for the paralyzed and epileptic in London. He has appended many notes which are of considerable value.

It is scarcely necessary to refer to M. Duchenne's reputation in connection with his subject, for it is well known that he was one of the pioneers in the therapeutic use of induced currents, and was the inventor of localized faradization, or, in other words, discovered that electricity could be confined to the skin or any separate muscle at the will of the operator.

The first chapter of this work gives a description and explanation of the three forms of electricity employed in medicine, and discusses their relative merits; and we may here observe that in the second edition the author made no mention of galvanism as a therapeutic agent, notwithstanding all that Remak had shown it to be capable of effecting, but in this edition he is compelled to recognize its value in many conditions.

It must cause all scientific men regret to witness the tone of the dispute between Duchenne and Remak, both of whom have contributed so largely to science. In their discussions both lost their temper, and so prejudiced were they that neither could profit by the researches of the other. It is particularly unfortunate that in this edition, written since the death of Remak, the author loses no opportunity of disputing the assertions of his opponent in regard to the constant current, and in a most undignified manner. He gives preference, however, to faradization, because it can be applied for any length of time without giving rise to any lesions of the skin where the poles are applied, except perhaps in some cases to a trifling erythema; whereas the constant current, when the electrodes are in contact with the skin for any considerable period, becomes exceedingly painful, and may cause vesication, or even deep eschars. Besides, on account of its power to excite the retina, galvanism may produce the most grave consequences, and the author relates a case, on page 16, in which, while using a galvanic battery, which was then new to him, he totally destroyed the sight of an eye.

Of the induced currents he treats at some length, and points out the purposes to which the primary and secondary currents are best adapted.

In the second chapter there is given a description of batteries for medical uses. M. Duchenne prefers, for obtaining the constant current, "Marie-Davy's sulphate of lead battery," as being more constant and less expensive than most others, besides not having the disadvantage, like Bunsen's battery, of the escape of fumes of nitrous acid. For the induced current, his own "volta-faradaic" apparatus is considered the best. A thorough and practical account is given of the method of applying local electricity, including a description of electrodes for different organs. The author's views differ somewhat from those of other writers on the subject,—Remak and Ziemssen, for instance, who recommend that the muscles should be electrized through their motor points. Duchenne states "that, in order to faradize a muscle completely, it is necessary that the moist rheophores should cover the whole of its surface; and when they are not large enough to do this, they should be applied in succession to all the points of the surface." Muscles that are deep-seated and cannot be reached by this means he recommends to be stimulated by indirect faradiza-

tion or through their motor nerves. He also uses the motor points when it is desired to produce contraction of a muscle *en masse*.

In Chapter III. the author gives some "historical and critical observations upon the principal methods of electrization," giving quite a full account of the action of the constant current; but he still disagrees on many points with Remak. In this connection he treats of trophic nerves, and states his firm conviction of their existence. He also refers to the resorbent or catalytic action of galvanism in "chronic articular affections with nodosities," ganglionic tumors, etc., having obtained cures in such cases by this agent.

Chapter IV. is devoted to a description of electro-medical instruments and their application, with an historical account of induction apparatuses from Faraday's instrument, which was "the first magneto-electric machine," to the latest induction battery.

Dr. Tibbits in a note describes Stöhrer's admirable galvanic battery, and also a portable induction apparatus by the same maker, which he considers the best for the "ordinary exigencies of practice," while he regards Duchenne's large volta-faradaic battery as the most perfect for medical purposes. These batteries are both vastly superior to the induction apparatuses generally in use, which have only a weak primary current, and no means of making the intermissions slow. Moreover, in most of the batteries there is no arrangement for reducing the strength of the current to the minimum. Duchenne makes use of his "water moderator" for this purpose; and any one familiar with faradization must have experienced the advantages of using some such contrivance.

THE EYE IN HEALTH AND DISEASE. By B. JOY JEFFRIES, A.M., M.D. 8vo, pp. 112. Alexander Moore, Boston, 1871.

Since Arlt, in 1846, published his brochure on the "Care of the Eyes," in the hope that by so doing "many would better protect their eyes from harm, many be saved much groundless solicitude and anxiety from trivial accidents to the eye, if they were better acquainted with the structure and functions of that organ," the public has been favored with several other works of like purport. Unfortunately for itself, however, that fickle auditory has bestowed but little attention on their contents, and the amount of ignorance in the community, even among well-educated people, as regards the functions, capacities, and care of their eyes, is at once astonishing and lamentable. We therefore welcome this book of Dr. Jeffries, and cordially recommend it both to the laity and to those of our profession who lack the time or inclination to make themselves acquainted with the more comprehensive works on the subject. We believe, however, that the author would have better fulfilled his aim and made a more interesting book if he had written less on pterygium, iritis, etc., and on the operations on the eye, and more nearly restricted himself to an explanation of the optical defects of the eye and to the amount of disease of that organ caused by insufficient lighting in our schools and by improper positions of the head and book,—often almost forced on the pupil by an injudicious construction of the chairs, benches, desks, etc. In a word, we regret that he has not devoted more space to those hygienic measures calculated to prevent disease of the eye and to preserve that important organ in good condition throughout life; for we cordially agree with the old German proverb which (in English dress) he has chosen for the motto of his book, that "a blind man is a poor man."

SUDDEN DEATH SOON AFTER PARTURITION. By THOMAS MOORE MADDEN, M.D.

This accident is rarely met with, but, when it happens, brings terror to all who witness it. The subject, though of great interest, has never been treated *extenso*, and we commend this essay to all attendants on lying-in hospitals. The remarks of Dr. M. were called forth by five cases which occurred in his practice at Rotunda Hospital in Dublin. There are many causes of sudden death *during* labor, of which the most familiar are organic disease of thoracic viscera, rupture of the uterus or bladder, bursting of an aneurism or abscess, sudden removal of pressure, causing great congestion of the viscera, hemorrhage, syncope, and shock, which Cazeaux says sometimes occurs a few days even after labor.

After labor it may occur from embolism, syncope, shock, anemia, or entrance of air into the uterine sinuses. Dr. Meigs pointed out the frequency of embolism in these cases as long ago as 1849.

Our author thinks it necessary to explain the difference between thrombosis and embolism.

He gives us full histories of his cases, in three of which no post-mortem could be obtained. His first case was one of inertia, requiring chloroform and the forceps. Peritonitis set in on the fourth day, and gangrene of the cervix and vagina, with the peritonitis, was found after death. The second case had a deformed pelvis, and premature labor (eight months) was brought on by the douche and forceps. Depression followed next day, resulting in death. No autopsy was made, but, from ecchymosis on the surface, Dr. M. thinks death was the result of entrance of air into the uterine sinuses. Death was sudden in this case. The third patient was still suffering from diphtheria when labor set in. Depression quickly followed, and she died the same evening, death being attributed to embolism. The fourth was a primipara, on whom chloroform and forceps were used after she had been in labor twenty-five hours. Although no had symptoms followed, she was found dead in her bed next morning. The probable cause was syncope. The fifth was a primipara who had an easy labor, followed by adherent placenta, which was successfully removed. Collapse soon occurred, followed by death the same evening. The post-mortem showed rupture of varicose veins of the left ovary.

In three of these cases the forceps were used, and in one of these three both the douche and forceps. In the third, we think an attack of diphtheria, with labor in addition, is sufficient to account for the fatal depression. In all but one, operative proceedings were necessary to complete labor. We think the use of instruments in labor makes a profound impression on most patients, no matter how much confidence they have in their attendants; and all such cases should be watched for some time after labor.

We hope the remarks of Dr. M. will attract the attention of all obstetricians, and call forth their experience in this neglected field of investigation.

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE. A Handbook for Students and Practitioners. By HENRY HARTSHORNE, A.M., M.D., etc. Third Edition, thoroughly revised. 12mo, pp. 487. Philadelphia, H. C. Lea, 1871.

This work is so well known to the profession that an extended notice of it would be needless at the present time. The author has made numerous additions and alterations, in such a manner, however, as not to increase the size of the volume,—a circumstance which no doubt is thought to add to its value as a text-book. The new articles occur in the discussion of tuberculosis, relapsing fever, and the therapeutic uses of carbolic acid and the hydrate of chloral, and are generally exhaustive treatises of what is known upon the subject. In relapsing fever, however, no mention is made of the silvery-white tongue or of the peculiar thermometric indications as aids to diagnosis. By a strange oversight, he also says (p. 134), "Hydrate of chloral has not so far been found safely available for hypodermic medication," having evidently not seen the article by Da Costa in the *American Journal of the Medical Sciences* for April, 1870.

But perhaps the best test of the value of the book is to be found in the author's views concerning inflammation and the germ-theory of disease. Prof. Hartshorne, it would seem, is disposed to lay great stress upon increased arterial pressure in inflammation, and to disregard the late researches of Legros and Onimus in relation to the peristaltic action of the capillaries themselves being the most important agent in such cases. It is true that ligation of the main artery of an inflamed limb will control inflammatory processes, but so also will cold and pressure locally applied, as in Mr. Paget's treatment of carbuncle; and the two methods surely do not act in the same manner.

In the article upon zymosis we were surprised at not finding any mention of the experiments of Prof. Tyndall, Pasteur, Frankland, etc. in regard to the germ-theory of disease, or of the important refutation of Hallier's fungus-cultivation at the

hands of Dr. Billings, of Washington. There are several other points in this volume which need revision, such as the confounding of cholera morbus with the Asiatic type in certain local American epidemics, and the assertion that yellow fever ever occurs endemically outside of the Gulf of Mexico. The chapter on blood-letting might be improved by referring to Dr. B. W. Richardson's lectures on that subject, and more stress might be laid upon the differential diagnosis between pneumonic and tubercular phthisis; but the work as a whole is well written and worthy of the reputation of its author.

THE FUNCTIONS AND DISORDERS OF THE REPRODUCTIVE ORGANS IN CHILDHOOD, YOUTH, ADULT AGE, AND ADVANCED LIFE, CONSIDERED IN THEIR PHYSIOLOGICAL, SOCIAL, AND MORAL RELATIONS. By WILLIAM ACTON, M.R.C.S., Fellow of the Royal Med. and Chir. Society, etc. Third American from the fifth London Edition. 8vo, pp. 348. Philadelphia, Lindsay & Blakiston, 1871.

The public appreciation of this work, as shown by the number of editions that have been called for, is a better criterion of its practical value than anything that can issue from the reviewer's pen. This edition has been thoroughly revised, and materials that have accumulated since the previous ones were published have been incorporated.

The work is a very valuable one, and its teachings should be the mental possession of every one who attempts to train up boys and to fit them for their duties as men. It is, on this account, no less valuable to the teacher and pastor than it is to the physician; in fact, its teachings are more valuable to the former than to the latter, for the evils here considered are best treated by prophylaxis. Both mental and physical evils have resulted before the physician has been consulted, and too frequently these results are permanent, or can at best be palliated, not really cured.

The book is free from all cant; and yet moral and religious stand-points are not neglected in the slightest degree in the consideration of the sins of youth and manhood and their consequences. In the articles on masturbation in childhood and youth, the causes and consequences are well considered; no undue importance is given to this vice, but its great dangers are pointed out, and in the consideration of its causes he suggests the proper line of treatment for the various classes of cases.

Dr. Acton lays great stress upon the value of "continence," which he defines as "*voluntary and entire* forbearance from indulging in sexual excitement or indulgences in any form." In another place he writes, "True continence is complete control over the passions, exercised by one who has felt their power, and who, were it not for his steady will, not only could, but would, indulge them." This continence must be entire, "mental" as well as physical. He asserts that the result of such habits will be the production of an almost wonderful degree of vigor of both body and mind; and he entirely disproves the old idea of the possible loss of virility as the result of non-use of the organ vested with the execution of that power. The occasional seminal emissions consequent on continence are a proof of vigor rather than of weakness. The difficulty of maintaining the condition of continence is not underrated, and yet it is proved to be no impossible task nor even a heavy burden. The point upon which stress is laid is a proper commencement. Of the correctness of the popular idea of reform after the "wild oats are sown" he expresses great mistrust,—in fact, almost entire disbelief.

Nor does Dr. Acton spare the married men. He very justly can see no difference, either in operation or result, between the masturbator and him who, to satisfy his worse than beastly lust, sacrifices his wife and his health to an imaginary need which has its origin only in his own vitiated thoughts and practices. The terrors of impotence, nocturnal and diurnal emissions, and spermatorrhoea are lucidly explained away: these conditions or accidents are placed upon their proper basis, their causes ascertained, and the method of cure pointed out.

GANGLION OF THE WRIST SUCCESSFULLY TREATED BY ELECTROLYSIS.—In this case (*British Medical Journal*, November 4), needles connected with the negative pole were introduced into the tumor.

BOOKS AND PAMPHLETS RECEIVED.

Lectures on the Clinical Uses of Electricity. Delivered in University College Hospital. By J. Russell Reynolds, M.D., F.R.S., Professor of the Principles and Practice of Medicine in University College, etc. 12mo, pp. 112. Philadelphia, Lindsay & Blakiston, 1872.

Neuralgia, and the Diseases that resemble it. By Francis W. Anstie, M.D., Lond., Lecturer on Medicine in Westminster Hospital School, etc. 8vo, pp. 302. New York, D. Appleton & Co., 1872. For sale by J. B. Lippincott & Co., Philadelphia.

On the Treatment of Pulmonary Consumption by Hygiene, Climate, and Medicine, in its Connection with Modern Doctrines. By J. Henry Bennet, M.D., Member of the Royal College of Physicians, etc. Second Edition. 8vo, pp. 190. New York, D. Appleton & Co., 1872. For sale by J. B. Lippincott & Co., Philadelphia.

On Chronic Hypertrophy of the Lips. By R. W. Taylor, M.D., Surgeon to the New York Dispensary. Reprinted from the *Medical World*, November, 1871.

Annual Report of the Surgeon-General of the United States Army, 1871.

GLEANINGS FROM OUR EXCHANGES.

THE CESAREAN OPERATION IN THE UNITED STATES. By Robert P. Harris, M.D.—This is the title of an historical monograph of some thirty pages in length, which has just appeared in the *American Journal of Obstetrics*, as a portion of the proceedings of the Philadelphia Obstetrical Society; to be followed in the February number of the said journal by an abstract of cases, published and unpublished, which have been, many of them, rescued from obscurity after a tedious research in public and private libraries, and by an extensive correspondence embracing every State in the Union. The subject of the paper is one of considerable interest, both to the surgeon and the obstetrician, and was undertaken by Dr. Harris for two reasons: 1st. To show the success of the Cesarean operation in our country; and 2d, the importance of resorting to the use of the knife early, if it is to be employed with a reasonable hope of success.

Up to the present writing, we are informed by Dr. Harris that he has collected sixty cases of the operation; which resulted in saving the lives of thirty-two women and twenty-seven children, the last operation dating Nov. 23, 1871. Of the sixty operations only seventeen were performed with a reasonable degree of promptness, calculated either by hours, or based upon the condition of the patient, the latest being twenty-four hours after the commencement of labor. These resulted in the saving of twelve women, 70½ per cent., and fourteen children, 82½ per cent. All the children were alive when delivered, save one, which was born of a sickly woman, having a fibrous tumor and affected with intermittent fever. Two died soon after delivery, one being deformed in the lower extremities, and both very feeble. Of the five women who died, two fell victims to peritonitis (one having been operated upon twice before); one to obstruction of the bowels; one to secondary shock; and one to "irritative fever," at the end of three weeks.

These results establish very conclusively the value of operating early, and before the woman has been injured by craniotomy or exhausted by other fruitless efforts at delivery. In contrast with this degree of success it may be well to state that there were eighty-eight Cesarean operations performed in Great Britain and Ireland from January, 1738, to March, 1866, before twelve women were saved. Dr. Harris has collected one hundred and six cases for Great Britain and Ireland, showing a saving of sixty children and but eighteen women. From 1822 to 1852 inclusive, twenty-six operations are recorded as performed in the United States, resulting in the saving of eighteen women and nine children. Ten of the twenty-seven women were operated upon on the first day of labor, resulting in saving eight, with seven of the children. English statistics

point to a more favorable result than American as regards the children, but to a much less favorable result as regards the women. This is ascribable in part to delay in most cases, but is no doubt also in great measure owing to the large proportion of subjects whose pelvic deformity arises from the existence of malacosteon, not a single case of which is recorded in the table for the United States, the deformities (33) being all due to rachitis in childhood. It is also probable that a cold damp climate is unfavorable to success. One-third of our operations have been performed in the States of Louisiana (8), Alabama (7), and Mississippi (5), resulting in saving twelve, or sixty per cent., of the women, and ten children. One woman, in Mississippi, was operated upon three times, and died of peritonitis on the third occasion, although there was no delay in making the section. The first and second operations took place in warm weather, and cold lotions were applied to the abdomen; the last was in October,—a much less favorable season of the year in that locality.

From the investigations of Sir Charles Bell, and more recently of Spencer Wells, and others, into the condition of the uterine wound after the completion of the operation, it has become a question of some moment to decide whether or not it is advisable to close this incision by sutures; and this matter has assumed a definite experimental character on both sides of the Atlantic during the last four years. Of nine examples collected from British tables, eight belong to this period, and of seven in Dr. Harris's table, six are in the same category. Two cases in each list had a favorable termination, silver sutures being employed in two; linen thread in one; and the long-tailed removable uninterrupted silk suture in the other. Two American women, recently reported in good health, who it is not at all probable could have been saved but for this expedient, have carried, without any perceptible inconvenience, the one six silver sutures, and the other five thread ones, for the last four years. The results of ovariectomy have demonstrated that traumatic peritonitis is not so much to be dreaded as the same inflammation from other causes; and those of the Cesarean operation have shown that hemorrhage, exhaustion, and the escape of the lochia into the peritoneal cavity are more to be feared than the injury to the peritoneum by the knife, especially when the last is not favored by exhaustive delay in resorting to it.

The value and safety of the uterine suture have yet to be shown, as it is impossible from the few cases in which it has been employed to say what may be anticipated from its use. It is certain that some cases might be saved by it that could not be without it, but it is equally certain that its influence as a cause of peritonitis has not been as yet estimated: it is probable that this may be more than balanced by the salutary effects of checking hemorrhage and preventing the entrance of uterine discharges into the abdominal cavity. What would be the effect of pregnancy upon imbedded sutures in the uterine walls has still to be shown, as we are not aware that any such test has yet been made. To obviate the possibility of risk in this event, various forms of removable suture have been proposed, but the difficulty of using them, as compared with the interrupted suture cut close, has prevented a full trial of their merits.

FISSION OF RED BLOOD-CORPUSCLES.—Dr. Laschkewitsch, of Charkow, places on record (*Lancet*, Oct. 28; from Stricker's *Medizinische Jahrbücher*, Heft iii.) a case of Addison's disease in which he obtained the remarkable phenomenon of fission of red blood-corpuscles. The patient was forty-five years of age, very anæmic, and suffered for about a year from considerable debility, with headache, palpitation of the heart, and dyspnoea. The size of the spleen, as ascertained by percussion, was somewhat increased. On examining the blood-corpuscles under the microscope, they appeared paler and larger than usual, and he observed that they changed their form whilst under examination. They presented biscuit, club, and vermiform shapes, thrust out one or more processes and again withdrew them, constrictions occurred, and ultimately portions separated off entirely. The addition of a little weak acetic acid considerably accelerated the rapidity with which these changes occurred. In the course of three months the bronzing of the skin of the face, neck, and hands became well marked.

EXCISION OF THE SCAPULA.—Mr. Charles Steele, F.R.C.S., reports in the *British Medical Journal*, October 14, the case of a boy (age not given) suffering from an encephaloid tumor involving the scapula, in whom this operation was performed. The disease seems to have been very rapid in its course; for, although the boy's mother said that it was of only six weeks' duration at the time it came under Mr. Steele's observation, the tumor occupied the whole surface of the scapula, with the exception of the inferior angle, and encroached slightly over the upper border towards the clavicle, being most elevated in the situation of the spine of the scapula. In appearance it was said to be very like a large cold abscess. The operation was commenced by making a free incision in the centre of the tumor down to the bone, when the characteristic appearance of encephaloid disease encysted in the muscles presented itself. Two elliptical incisions from the upper border to the inferior angle of the scapula were then made. The bone was disarticulated from the clavicle and also from the humerus, care being taken to cut the ligaments and tendons close to the latter bone, and the tumor was removed entire in its muscular capsule. The patient did well at first, but at the end of three weeks the disease had redeveloped itself in the ulcer left by the operation, and the boy finally sank under it.

THE ORIGIN AND DISTRIBUTION OF MICROZYMES (BACTERIA) IN WATER.—In the *Quarterly Journal of Microscopic Science* for October, 1871, there is published a most interesting memoir by Dr. Burdon-Sanderson upon this subject, and upon the circumstances which determine the existence of bacteria in the tissues and liquids of the living body. His conclusion, based upon a careful consideration of facts which presented themselves in the course of the experiments related in the paper, is that there is no developmental connection between microzymes and torula cells, and that their apparent association is one of mere juxtaposition. The grounds of this conclusion are stated thus:

1. The prompt appearance of torula cells in Pasteur's Solution whenever it is exposed to the air, and the rapid development and luxuriant fructification of the higher form (penicillium), show that, so far as the chemical composition of the liquid is concerned, there exist in it all the conditions favorable to the process.

2. Our experiments prove that when precautions are taken to prevent contamination by impure surfaces or liquids, the development which ends in penicillium goes on from first to last without the appearance of microzymes.

3. Whenever it is possible to impregnate the test-liquid with microzymes without at the same time introducing torula cells or germs, the development of the former begins and continues by itself without any transformation into the latter.

Thus, fungi are not developed without the access of air, notwithstanding the presence of microzymes in the same liquid in which, microzymes being absent, but air having access, they appear with the greatest readiness.

With regard to the spontaneous evolution of fungi, he says that the mode to determine the forms in which germs of fungi exist in the air, is that long ago proposed by M. Pouchet,—that of projecting a jet of air on a glass plate moistened with glycerine or syrup. A few experiments were made, but the results were mostly negative, for in London the particles of soot and refuse fragments thus collected are so numerous that organized particles, even if present, can scarcely be distinguished. Dr. B. found it a much more successful plan simply to expose a glass covered with glycerine to the air. On such a surface it was always possible to find a number of cells which resembled torula cells, and occasionally penicillium acrospores.

From this result he does not, however, conclude that it is by these forms that the cosmopolitan fungus (as Hallier calls it) is usually propagated; it frequently happens that liquids which have been once exposed, although they contain no visible cells whatever, rapidly germinate without further exposure. It is also certain that although air is the main source of what we may venture to call fungus-impregnation, as distinguished from impregnation with microzymes, yet the two acts may take place at the same moment, germs of torula being often contained in the same liquid media as germ-particles of microzymes. That this is so, is proved by instances

already referred to, in which liquids protected from air became filled with torula cells.

LIQUID FOR THE PRESERVATION OF WET ANATOMICAL PREPARATIONS.—Dr. B. Titcomb, in Transactions of American Medical Association (*Canadian Pharmaceutical Journal*; from *Chicago Medical Times*), suggests the following plan for keeping objects of pathological anatomy and material for dissection:

First place the object in a vessel containing pure water; let it remain a few hours, or over-night; then transfer it to another containing a solution of creasote,—(5ij to ℥xij of water; let it remain over-night; then place it in a jar or vessel containing a liquid composed of the following:

Chloride of Sodium, ℥iss;
Sulphate of Alumina, ℥iss;
Nitrate of Potassa, ℥vi;
Water, ℥vii.

COXO-FEMORAL DISARTICULATION.—According to the *Medical Record* of October 2, the first regular coxo-femoral disarticulation was probably made by Kerr, of Northampton, England, in 1774, and was for hip-joint disease, or coxalgia, on a little consumptive girl, who lived to the eighteenth day after it.

MISCELLANY.

THE CHOLERA.—The number of deaths from this disease is diminishing in St. Petersburg, Königsberg, and Dantzic, but increasing in Constantinople and Elbing.

A YOUNG MOTHER.—Dr. Haining reports in the *British Medical Journal* for October 28 the case of a young girl who became a mother at the early age of twelve years.

The death of Mr. Samuel Solly, F.R.S., is announced. It is contemplated by his former pupils at St. Thomas' Hospital to erect a memorial to his memory.

STUDENTS AT THE PROVINCIAL MEDICAL SCHOOLS OF GREAT BRITAIN.—We recently (No. 29) published the number of medical students registered at the medical schools of London. From the *Medical Times and Gazette* for November 4, 1871, we extract the following with regard to the provincial schools:

	1871.	1870.
Manchester Royal School of Medicine and Surgery	111	98
Birmingham " " "	60	76
Liverpool Infirmary and School of Medicine and		
Anatomy	54	58
Leeds School of Medicine	45	46
Bristol Old Park Medical School	36	30
Cambridge University School	27	—
Newcastle-upon-Tyne College of Medicine	25	35
Sheffield Medical Institution	10	14
	368	357

Though there is a slight increase in the total, there is a falling off at all of the schools except those of Manchester and Bristol. Including a slight addition to the new entrées at the London schools since the date of the report published in No. 29, there are now 1491 students pursuing their studies in London, and 1859 in the United Kingdom.

THERE are this year sixty-seven students in the Medic-Chirurgical School of Lisbon. Of these, nineteen are students of the first year, fifteen of the second, sixteen of the third, thirteen of the fourth, and four of the fifth year.

THE FATE OF INDIAN DOCTORS.—The practice of medicine among the Indian nations leads to as unpleasant consequences as those we recently referred to as having happened to a physician in Egypt. Indian Joe, a Piute medicine-man, well known among the whites, having failed to restore to health two sick Indians, was stoned to death by his tribe.

A LESSON FOR THE DAY.—The sympathetic influence of the outcries of labor upon pregnant women is well known. In lying-in hospitals it is not unusual for one noisy patient to bring down several others. Even old nurses, long past the climacteric, will hold their breath and bear down in sympathy with the expulsive pains. Stock-breeders have to guard against this tendency, for sometimes a whole herd will abort after one of their number has dropped her calf.

According to M. Sue (*Essais historiques sur l'Art des Accouch.*, vol. i. p. 599), a midwife, well advanced in pregnancy, while in attendance on a lady of Padua, was herself suddenly seized with the pains of labor. The housemaid, summoned from the basement,—not without many screams, we presume,—pluckily laid down her broom and made shift to deliver mistress and midwife. Unfortunately, she placed the infants—both of the same sex, as bad luck would have it—in the same cradle, where one of them was shortly afterwards found dead. As neither of the women could make out a clear title to the survivor, much wrangling and bad blood resulted.

A GERMAN PHYSICIAN'S DEFENCE.—A physician of Bromberg (*Wiener Medizinische Presse*, September 24, 1871) was fined five thalers for not following a police-regulation with regard to smallpox. He appealed, and demanded a judicial decision. This was permitted, and he asked his acquittal. He contended that he had not recognized the disease as smallpox, and demanded that the existence of the affection be proven. This proof was, naturally, not furnished, and his acquittal necessarily resulted.

DR. MOFFAT (*Food Journal*, vol. ii. 384) read before the British Association, in August last, a suggestive paper on "The Geological Systems and Endemic Diseases." He showed that goitre and other endemic complaints are very common among dwellers on the carboniferous system, while they are almost unknown on the Cheshire or the new red sandstone. Dr. Moffat found that wheat grown upon soil on the latter formation yields the largest quantity of ash, and that it contains a much greater quantity of phosphorous acid and oxide of iron than that grown upon other formations. The deductions drawn from these facts were that persons of anæmic or strumous habit should, if possible, be transferred from a carboniferous to a red sandstone soil, and should be dieted as far as practicable with food which contains the maximum quantity of oxide of iron and phosphates or nutritive salts.

THE PENNSYLVANIA HOSPITAL.—Our readers will be glad to learn that five hundred and fifty students are in attendance upon the lectures at the Pennsylvania Hospital, and that the majority of them are matriculates of the University of Pennsylvania and of the Jefferson Medical College. The hospital seems to have regained entirely its popularity with students.

FESTINA LENTE.—The numerous friends of Dr. Marshall Hall will be pained to learn that he was forestalled in advising the operation of tracheotomy for epilepsy. Early in this century, the late very eccentric Dr. James Carson, of Liverpool, was once summoned in great haste to see a stranger at a hotel, who, at dinner, had floundered off his chair on to the

floor,—apparently choking, but really in a severe epileptic fit. Always acting with promptness, Dr. C. at once summoned the nearest surgeon, and had the unhappy windpipe slit open in a trice. Imagine the dismay of the doctor and of the surgeon when the patient, in a great rage, sprang upon his feet, "spluttering out, as well as his now impaired vocal organs enabled him, 'Who's cut my throat? Where's the man who cut my throat?'" We are not told how many guineas the surgeon got, nor what fee the off-hand doctor pocketed for this his first and last case of tracheotomy in epilepsy.

SIXTEEN Japanese students have matriculated this year in the University of Berlin. Most of them are attending the medical classes; some are students of jurisprudence and natural science.

THE LAWYER TURNING DOCTOR.—Lord Brougham, in his Autobiography, writing to Lord Grey, of whose family scarlet fever had taken hold, gives his advice, with all the freedom of a regular medical practitioner, in the following language, under date of September, 1813: "I know a good deal of that damnable disease, both from having had it myself twice, and from several of our family having had it in the worst possible shape. I have attended a good deal to the subject of cold affusion, and I beg of you to urge your medical men by all means to try it. They sometimes are afraid; but vaccination is not more demonstrably certain. Romilly's eldest daughter was saved by it. My sister I saw literally restored to life by it. She had been given over, and was thought to be actually gone, when the medical men ordered cold air to be let in upon her. This was long before the practice had become common. In Romilly's case it was by the more powerful application of cold water, applied again and again over the whole body, till it brought down the pulse and heat."

Lord Brougham makes no reference to Currie's work on "Water in Fever and other Diseases," the fifth edition of which was published in 1814. Of the various modes of treatment had recourse to in scarlet fever, that by the external use of cold and tepid affusion or immersion, and sponging the surface, has abundant experience in its favor.

Among others who have written on the subject, Dr. John Bell, in his volume on Baths, gives emphatic testimony in favor of this treatment.

PRIZE ESSAYS.—In accordance with the will of the late Dr. Lacaze (*Boston Med. and Surg. Jour.*, November 9, 1871; from *New York Medical Record*), a prize of ten thousand francs is to be awarded by the Faculty of Medicine of Paris every second year for the best work on phthisis and on typhoid fever, alternately. The first prize will be awarded at the end of the academical year 1871-72, for the best work on phthisis. Essays (with a distinguishing motto and the author's name in a sealed envelope) must be sent in before July 1, 1872. The prize is open to foreigners.

APPOINTMENTS AND CHANGES.—Prof. Karsten, the Professor of Botany in the University of Vienna, has finally been displaced. Dr. Douglass Powell has been appointed to the Chair of Materia Medica in the Charing-Cross Hospital, London, to succeed Dr. Headland, who was transferred to the Chair of Medicine in the same institution, vacant by the death of Dr. Hyde Salter. Dr. G. W. Davidson has been chosen to the Chair of Comparative Anatomy in the Royal Veterinary College, Edinburgh. Dr. A. P. Lankford is the successor of Prof. Paul F. Eve in the Chair of Principles of Surgery and

Topographical Anatomy in the Missouri Medical College. Dr. E. E. Phelps has been appointed to the Chair of General Pathology, and Dr. E. P. Frost to that of Theory and Practice of Medicine, in the New Hampshire Medical College. Dr. James Tyson has been appointed Curator of the Pathological Museum of the Philadelphia Hospital, *vice* Dr. William Pepper, resigned. Dr. Tyson has resigned the position of Microscopist which he has held for several years in the same institution. Dr. William M. Chamberlain has been appointed one of the physicians to the Charity Hospital, New York, to succeed Dr. Janeway, recently appointed to Bellevue Hospital as successor to Prof. T. G. Thomas. We understand that Dr. Nélaton has announced his intention of permanently residing in England.

THE LEGALITY OF NECROPSIES.—"The authorities of Guy's Hospital have again," according to the *British Medical Journal*, Oct. 14, "been summoned before the magistrates, accused of having opened a body without the permission of the friends of the deceased. It may be remembered that, to obviate the constant recurrence of such complaints as that now made before the public, a rule was made by the committee at the hospital to the effect that they reserved to themselves the right of making post-mortem examinations when deemed necessary. If the case were not likely to afford any very valuable pathological information, and the friends were much opposed to the examination, it was provided that a necropsy would not be insisted upon. This rule was printed and suspended in the admission-room, for the information of patients and their friends. We repeat that it seems to us an eminently just and judicious rule. Humanity and science are alike interested in the proper scrutiny of the conditions of hidden organs of those who have died of disease. It is a proper rule that patients dying in public institutions should render this last service to the humanity which has succored them. Nothing but an unworthy and ignorant prejudice opposes."

ILL-GOTTEN REVENUE.—Under this title the *Medical Times and Gazette* calls attention to the fact that the British government still derives some income from the sale of patent medicines. We quote the following passage, because it seems quite as applicable to this country as to Great Britain: "For the paltry sum of £68,000 odd the government allies itself with quacks and quackery, and gives the authority of its name to the 'genuineness' of the trash sold under the name of patent medicine. The amount of mischief inflicted by secret remedies is out of all proportion to the advantage which the stamp duty gives the state."

MORTALITY FROM SMALLPOX.—The number of deaths from smallpox in Philadelphia during the weeks ending December 16 and 23 were, respectively, 211 and 228, 267 of which were of minors.

A TOWN FULL OF SICK.—We learn from the *Wiener Medizinische Presse*, September 24, 1871, that in the little Hungarian town of Nagy-Enyed intermittent fever and other diseases prevail to such an extent that the native physicians—of whom there are three—have each three hundred patients to visit. This unfortunate sanitary condition demands also its offerings, since scarcely a day passes in this little town in which there are not three funerals.

THE NUMBER OF DOCTORS.—In Russia there is one doctor to every 17,800 inhabitants; in Prussia, one to every 3100;

in France, one to every 2600; in Great Britain, one to every 2500; in Italy, one to every 2200; in Holstein, one to every 2100; and in Hamburg, one to every 1230.—*Good Health*, November, 1871.

THE Union Medicate resurrects the following from an old journal: Edward Bright, born in Malden, county of Essex, died at the age of twenty-nine years, in a condition of extreme obesity. He was five feet nine inches in height, and measured from shoulder to shoulder three feet and some inches. His weight was five hundred and ninety-five pounds. His waistcoat could be buttoned around seven men of ordinary size without bursting it.

MORTALITY OF PHILADELPHIA.—The following reports are condensed from the records at the Health Office:

	For the week ending	
	Dec. 16.	Dec. 23.
Consumption	44	51
Other Diseases of Respiratory Organs	45	62
Diseases of Brain and Nervous System	49	58
Diseases of Organs of Circulation	8	16
Diseases of the Digestive Organs	27	17
Diseases of the Genito-Urinary Organs	6	10
Zymotic Diseases	234	254
Cancer	9	4
Casualties	13	10
Debility	20	24
Intemperance	4	0
Malformation	0	1
Neglect	1	0
Old Age	14	12
Poisoning	1	1
Stillborn	23	16
Scrofula	2	2
Suicide	0	2
Syphilis	0	1
Tumors	1	1
Unclassifiable	8	10
Unknown	3	2
Totals	512	554
Adults	238	283
Minors	274	271

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM DECEMBER 5, 1871, TO DECEMBER 18, 1871, INCLUSIVE.

FRANTZ, J. H., SURGEON.—By S. O. 463, War Department, A. G. O., December 7, 1871, relieved from duty in Department of the Platte, to proceed to Baltimore, Md., and, on arrival, report by letter to the Surgeon-General.

GIBSON, JOSEPH R., ASSISTANT-SURGEON.—By S. O. 252, Department of the South, December 2, 1871, assigned to duty at Yorkville, S.C.

SMART, CHARLES, ASSISTANT-SURGEON.—By S. O. 269, Department of the East, December 14, 1871, granted leave of absence for thirty days, on Surgeon's certificate of disability.

CRONKITE, H. M., ASSISTANT-SURGEON.—By S. O. 463, A. G. O., c.s., to report to the Commanding General Department of the South for assignment to duty.

HEIZMANN, C. L., ASSISTANT-SURGEON.—By S. O. 211, Department of the Platte, December 4, 1871, granted leave of absence for thirty days.

MONROE, F. LE B., ASSISTANT-SURGEON.—By S. O. 219, Department of the Platte, December 14, 1871, assigned to duty as Post-Surgeon at Fort D. A. Russell, Wyoming Territory, relieving Surgeon J. H. Frantz, U.S.A.

POWELL, R., ASSISTANT-SURGEON.—By S. O. 463, A. G. O., c.s., to report to the Commanding Officer Department of the Gulf for assignment to duty.

KIMBALL, JAMES P., ASSISTANT-SURGEON.—By S. O. 464, War Department, A. G. O., December 8, 1871, leave of absence extended sixty days.

WILSON, WILLIAM J., ASSISTANT-SURGEON.—By S. O. 463, A. G. O., c.s., to report to the Commanding General Department of the Missouri for assignment to duty.